

**User Manual** 





# **Edition Notes**

The Legend 300E Spot User Manual Rev. 01g covers the description, safety precautions, installation, programming, operation, and maintenance of the Legend 300E Spot. CHAUVET® released this edition of the Legend 300E Spot User Manual Rev. 01g in December 2010.

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### Intended Audience

Any person in charge of installing, operating, and/or maintaining the Legend 300E Spot should read the guide that shipped with it and this manual in their entirety before installing, operating, or maintaining this product.

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# Document Revision

The Legend 300E Spot User Manual Rev. 01g supersedes all previous versions of this manual. Please discard any older versions of this manual you may have, whether in printed or electronic format, and replace them with this version.

Manager

**PD Manager** 

Editor

# Product at a Glance

| O. Desmonteix   | smonteix D. Couppe |   | M. Graham                 | F. S | Sellers |
|-----------------|--------------------|---|---------------------------|------|---------|
| Use on Dimmer   |                    | X | Auto Programs             |      | X       |
| Outdoor Use     |                    | X | Auto-ranging Power Supply |      | Р       |
| Sound Activated |                    | X | Replaceable Fuse          |      | Р       |
| DMX             |                    | Р | User Serviceable          |      | ×       |
| Master/Slave    |                    | X | Duty Cycle                |      | ×       |



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# 1. Before You Begin

# What is Included

- · One Legend 300E Spot
- · Two omega clamps
- · Three additional gobos
- One Warranty Card
- · One Quick Reference Guide

# Unpacking Instructions

Immediately upon receiving this product, carefully unpack it and check the container in which you received it. Make sure that you have received all the parts indicated above and that they are all in good condition. If the material inside the container (this product and any other accessory included with it) appears damaged from shipping, or if the container shows signs of mishandling, notify the shipper immediately. In addition, retain the container and all the packing material for inspection.

See the Claims section in the Technical Information chapter.

# Typographic Conventions

| Convention      | Meaning  |  |  |
|-----------------|--|--|--|
| 1~512           | A range of values in the text                          |  |  |
| 50/60           | A set of mutually exclusive values in the text         |  |  |
| [10]            | A DIP switch to be configured                          |  |  |
| Claims          | A new term, or a section or chapter of this document   |  |  |
| "COLORado™ UM"  | The name of another publication or manual              |  |  |
| <set></set>     | A button on the fixture's control panel                |  |  |
| Settings        | A fixture function or a menu option                    |  |  |
| MENU > Settings | A sequence of menu options                             |  |  |
| 1~10            | A range of menu values from which to choose in a menu  |  |  |
| Yes/No          | A set of two mutually exclusive menu options in a menu |  |  |
| ON              | A unique value to entered or select in a menu          |  |  |

# **Icon Meaning**

| Icon        | Meaning   |
|-------------|---|
| $\triangle$ | This icon indicates critical installation, configuration or operation information. Failure to comply with this information may render the fixture partially or completely inoperative, damage third-party equipment, or cause harm to the user. |
| <b>(i)</b>  | This icon indicates important installation or configuration information. Failure to comply with this information may prevent the fixture from functioning correctly.  |
|             | This icon indicates useful, although non-critical information.  |



The term "DMX" used throughout this document refers to the USITT DMX512-A transmission protocol.



# **Safety Notes**

Please read the following notes carefully because they include important safety information about the installation, usage and maintenance of this product.

It is important to read all these notes before starting to work with this product.



There are no user serviceable parts inside this product. Any reference to servicing it you may find from now on in this User Manual will only apply to properly CHAUVET® certified technicians. Do not open the housing or attempt any repairs unless you are one of them.



Please refer to all applicable local codes and regulations for the proper installation of this product.

#### **Personal Safety**

- · Avoid direct eye exposure to the light source while the fixture is on.
- · Always disconnect this product from its power source before servicing.
- Always connect this product to a grounded circuit to avoid the risk of electrocution.
- <u>Lamp explosion hazard!</u> Do not open the lamp cover within five minutes of having turned off the fixture.
- The bulb remains hot for a long time after turn off. Never touch the bulb barehanded and always handle it by its metallic contacts.
- Do not touch this product's housing when operating because it may be very hot.

### **Mounting and Rigging**

- This product is for indoor use only! To prevent risk of fire or shock, do not expose this product to rain or moisture.
- · Make sure there are no flammable materials close to this product while operating.
- When hanging this product, always secure it to a fastening device using a safety chain/cable (not provided).
- Do not carry this fixture from the head; use the handles instead.

#### **Power and Wiring**

- Always make sure that you are connecting this product to the proper voltage, as per the specifications in this manual or on the product's sticker.
- · Connect this fixture ONLY to a grounded and protected circuit.
- · Never connect this product to a dimmer pack.
- · Make sure the fixture's power cable is not crimped or damaged.
- Never disconnect this product by pulling or tugging on the power cable.

#### Operation

- Do not operate this fixture if you see damage on the housing, lenses, ultraviolet filter, or cables; have the damaged parts replaced by an authorized technician at once.
- Do not aim this fixture toward any surface closer than 16 feet (5 m). Otherwise, you
  may damage or overheat the illuminated surface.
- Do not cover the ventilation slots when the fixture is operating to avoid internal overheating.
- Do not aim this fixture toward the Sun. Otherwise, the lenses could concentrate the solar energy and cause internal overheating.
- The maximum ambient temperature (Ta) is 104° F (40° C). Do not operate this
  product at a higher temperature.
- · In case of a serious operating problem, stop using this product immediately!



In the unlikely event that your Legend 300E Spot may require service, please contact CHAUVET® Technical Support.



# 2. Introduction

# **Product Description**

The Legend 300E Spot is a compact, electronic moving yoke spot fixture equipped with a 300-watt HID lamp. It includes a color wheel with eight slots plus white. It also comes with two gobo wheels, one with seven rotating slot-n-lock gobos plus open, and the other with eight fixed gobos plus open. It also includes remote focus and a rotating 3-facet prism.

# **Features**

21 or 29-channel compact, fully electronic, 300-watt moving yoke spot

Pan: 540<sup>0</sup>
 Tilt: 270<sup>0</sup>

Color wheel: 7 colors + white

Split/linear colors

Color wheel spins at variable speed

· Gobo wheel 1: Indexed, rotating gobo wheel with gobo shake

7 metal, slot-n-lock gobos + open Gobo wheel spins at variable speed

16-bit gobo rotation

· Gobo wheel 2: Indexed gobo wheel

8 metal gobos + open

Gobo wheel spins at variable speed

- · Static frost
- CTC filters (5,600 K and 3,200 K)
- CMY color mixing system with vector speed adjustments
- · 3-facet rotating prism
- Variable shutter
- · Variable iris
- · Variable focus
- Variable 16-bit dimming (0~100%)
- · Linear zoom (16~35°)
- · Individual reset of pan/tilt, color, gobo, shutter, prism, focus
- Move-in-black for pan/tilt, color, gobo
- · Remote fixture reset, lamp on/off, and vector control speed adjustments
- · Built-in movement macros with range adjustments
- · Built-in color macros
- · Battery powered display

# Additional Features

- 3-pin and 5-pin DMX connections
- Three additional free gobos
- · User-configurable lamp ignition delay
- User-configurable maintenance reminder
- Electronic ballast with power factor correction
- · Electronic power supply
- · Automatic pan & tilt correction
- Pan & tilt locks
- · Lamp & fixture use timers
- · Power saver mode

# **Options**

- W-DMX (wireless DMX) receiver
- W-DMX (wireless DMX) transmitter



# **DMX Channel Summary**

# Mode 1

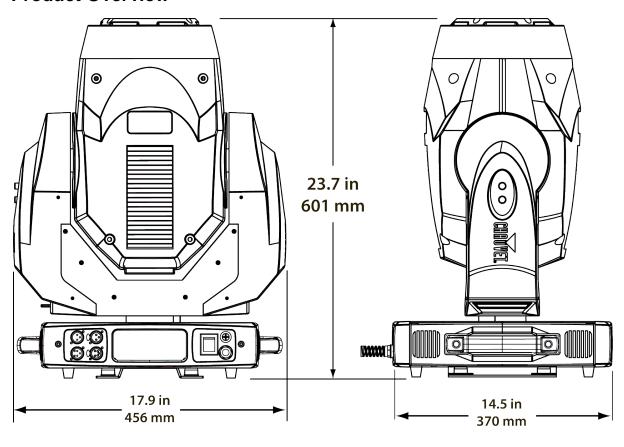
| DMX Channel | Function       |
|-------------|----------------|
| 1           | Pan            |
| 2           | Pan Fine       |
| 3           | Tilt           |
| 4           | Tilt Fine      |
| 5           | Pan/Tilt Speed |
| 6           | Dimmer         |
| 7           | Shutter        |
| 8           | Color          |
| 9           | Cyan           |
| 10          | Magenta        |
| 11          | Yellow         |
| 12          | Gobo 1         |
| 13          | R-Gobo 1       |
| 14          | Gobo 2         |
| 15          | Focus          |
| 16          | Zoom           |
| 17          | Prism          |
| 18          | R-Prism        |
| 19          | Iris           |
| 20          | Frost          |
| 21          | Function       |

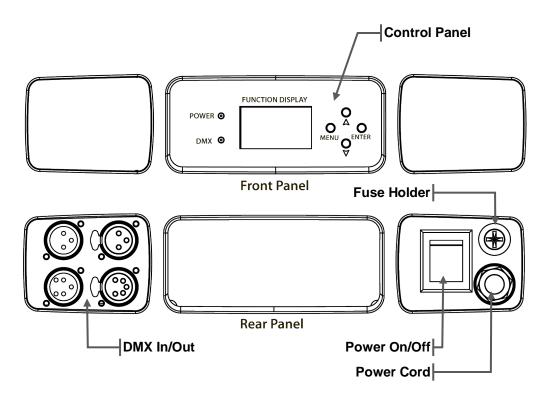
# Mode 2

| DMX Channel | Function        |
|-------------|-----------------|
| 1           | Pan             |
| 2           | Pan Fine        |
| 3           | Tilt            |
| 4           | Tilt Fine       |
| 5           | Pan/Tilt Speed  |
| 6           | Dimmer          |
| 7           | Dimmer Fine     |
| 8           | Shutter         |
| 9           | Color           |
| 10          | Cyan            |
| 11          | Magenta         |
| 12          | Yellow          |
| 13          | CMY Speed       |
| 14          | Gobo 1          |
| 15          | R-Gobo 1        |
| 16          | R-Gobo 1 Fine   |
| 17          | Gobo 2          |
| 18          | Focus           |
| 19          | Zoom            |
| 20          | Prism           |
| 21          | R-Prism         |
| 22          | R-Prism Fine    |
| 23          | Iris            |
| 24          | Frost           |
| 25          | Pan/Tilt Macro  |
| 26          | P/T Macro Speed |
| 27          | Preset Color    |
| 28          | Color Macro     |
| 29          | Function        |
|             |                 |



# **Product Overview**







# 3. Setup

# **AC Power**

The Legend 300E Spot has an auto-ranging power supply that can work with an input voltage range of 100~240 VAC, 50/60 Hz.

Make sure that you are connecting this product to the proper voltage, as per the specifications in this guide, the product's user manual, or on the product's sticker.



Always connect the Legend 300E Spot to a protected circuit with an appropriate electrical ground to avoid the risk of electrocution or fire.

To determine the power requirements for the Legend 300E Spot see the label affixed to the side of the fixture. Alternatively, you may refer to the corresponding specifications chart in the *Technical Information* chapter of this manual.

The listed current rating indicates the maximum current draw during normal operation. Please refer to the *Sizing the Circuit Breakers* section in the *Appendix* chapter of this manual.



Never connect the Legend 300E Spot to a rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer channel serves only as a 0 to 100% switch.

## AC Plug

The Legend 300E Spot comes with a bare ended power input cord. The fixture side of this power cord enters the fixture through a strain reliever (rubber boot) and it cannot be disconnected from the fixture. Use the table below to wire the plug to the power cord.

| Connection | Wire (US)    | Wire (Europe) | Screw Color     |
|------------|--------------|---------------|-----------------|
| AC Live    | Black        | Brown         | Yellow or Brass |
| AC Neutral | White        | Blue          | Silver          |
| AC Ground  | Green/Yellow | Green/Yellow  | Green           |



Make sure to disconnect the fixture's power cord before replacing a blown fuse, and always replace it with a fuse of the same type and rating.

## Fuse Replacement

- 1) With a Philips screwdriver, unscrew the fuse holder out of its housing and remove the blown fuse from its holder.
- 2) Replace the blown fuse with a fuse of the exact same type and rating.
- 3) Reverse step 1 and reconnect power.

# **DMX Linking**

You may link the Legend 300E Spot to a DMX controller using a standard DMX serial connection. If using other DMX compatible fixtures with the Legend 300E Spot, it is possible to control them individually with a single DMX controller.

If you are not familiar with the DMX standard, you may download the "DMX Primer" document from the CHAUVET® Web site.

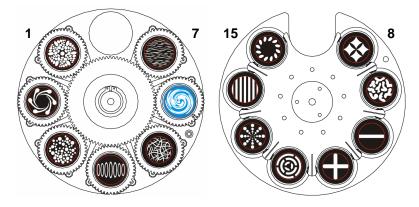
#### **DMX Modes**

The Legend 300E Spot uses the standard DMX data connection for its DMX Modes (Mode 1 and Mode 2). You will find information about these DMX modes in the *Introduction* chapter (brief description), the *Operation Instructions* chapter (configuration details), and the *DMX Values* section (individual channel values)



# **Gobo Wheels**

The Legend 300E Spot comes with two gobo wheels. Gobo wheel #1 has seven rotating gobos, while gobo wheel #2 has eight fixed gobos, as indicated below. The diagram shows the first and last gobo on each wheel, as per the  $DMX\ Values$  tables.



**Rotating Gobos** 

**Fixed Gobos** 

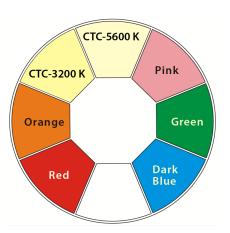
# **Extra Gobos**







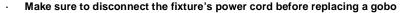
# **Color Wheel**





# Gobo Replacement

The gobos in the Legend 300E Spot's gobo wheel are removable from their gobo plates. This operation is quite simple, although it requires the technician to be careful and to follow the recommended procedure.

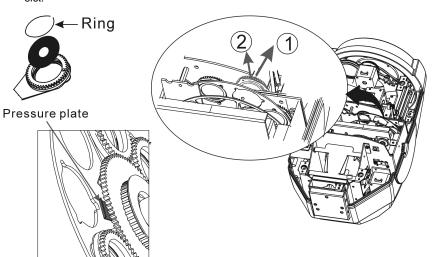




- · Always replace a gobo with a gobo of the same dimensions.
- When inserting a glass gobo, always make sure that the shinny side of the gobo (glass base) faces the lamp. This provides a layer of protection against the high temperature from the lamp.

#### **Procedure**

- 1) Turn the fixture off and disconnect it from the power outlet.
- Open the head cover by loosening the four fastening screws at the sides of the top cover.
- 3) Separate the gobo plate away from the gobo wheel by pushing it toward the front of the moving head (direction 1 in the diagram). Be careful not to push the gobo out of the gobo plate.
- 4) Extract the gobo plate by pulling it outward (direction 2 in the diagram).
- 5) On a flat surface, remove the expansion ring that holds the gobo in place and remove the gobo from the gobo plate.
- 6) Insert a new gobo and hold it in place with the expansion ring.
- 7) Slide the tip of the gobo plate under the pressure plate near the center of the gobo wheel
- 8) Push the gobo plate inwards. DO NOT force the gobo plate into the gobo wheel slot. If correctly installed, the gobo plate should accommodate itself in the gobo wheel slot



# Gobo Replacement Diagram

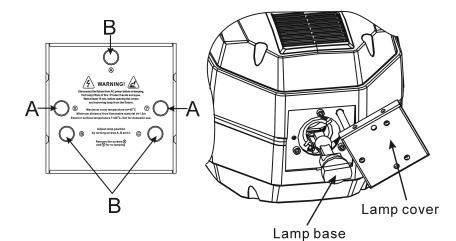


# Lamp Replacement

The Legend 300E Spot is equipped with a Philips MSR Gold 300/2 lamp. This lamp uses a socket called FastFit, which allows for fast and easy lamp changes. Follow the procedure below to safely change the Legend 300E Spot's lamp.

#### **Procedure**

- 1) Turn the fixture off and disconnect it from the power outlet.
- 2) Wait at least 15 minutes for the lamp to cool down.
- 3) Loosen the two screws on the lamp cover (marked "A" in the diagram).
- 4) Lift and rotate the lamp cover as per the diagram to expose the base of the lamp.
- 5) Rotate the ceramic base of the lamp 90° counterclockwise.
- 6) Pull the lamp out by holding it from its base only.
- 7) Insert the new lamp and turn it 90° clockwise.
- 8) Reverse steps 3 and 4.
- 9) Use the adjustment screws (marked "B" in the diagram) to position the lamp in the center of the reflector to obtain the best output.



# Lamp Replacement Diagram

# Increasing the Lamp's Life

- ALWAYS turn the lamp off by using the DMX controller or the fixture's control panel.
   Then wait at least five minutes before switching off the fixture. This will keep the fans running to extract any remaining heat from the fixture's head.
- DO NOT power cycle the fixture unless it is necessary.
- DO NOT touch the lamp without wearing gloves to avoid leaving grease on the bulb or on the contacts that could reduce the lamp's life.
- ALWAYS change the lamp when it has reached its recommended lifespan to avoid the risk of lamp explosion.



# Mounting

Before mounting this fixture, read and follow the safety recommendations indicated in the Safety Notes (page 2 of this manual).

## Orientation

Always mount this fixture in any safe position while making sure that there is adequate room around it for ventilation.

Make sure to mount this fixture away from any flammable material as indicated in the Safety Notes (page 2 of this manual).

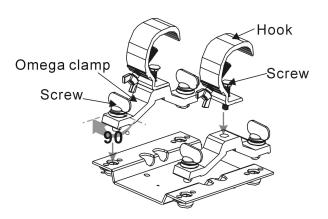
# Rigging

CHAUVET® recommends following the general guidelines below when mounting the Legend 300E Spot.

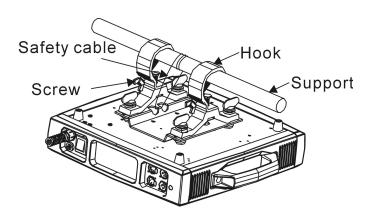
- When selecting an installation location, consider ease of access to the fixture for operation, programming adjustments, and routine maintenance.
- Never mount the fixture in places where rain, high humidity, extreme temperature changes, or restricted ventilation may affect it.
- If hanging this fixture, make sure that the location where you are mounting the
  fixture can support its weight. Please see the *Technical Specifications* section of this
  manual for the weight requirement of this fixture.

#### **Procedure**

The Legend 300E Spot comes with an already installed mounting bracket to which you will be able to attach the two included omega clamps. Be aware that you will have to use two mounting points per fixture. In addition, you will have to use a safety cable (not included) to link the fixture to the structure.



# Product Mounting Diagram





# 4. Operation

# Control Panel Description

| Button   | Function   |  |  |
|--|--|--|--|
| <menu></menu>  | Exits from the current menu or function  |  |  |
| <enter></enter>  | Enables the currently displayed menu or sets the currently selected value in to the current function |  |  |
| Navigates upwards through the menu list and increases the numeric value when in a function |  |  |  |
| <down></down>  | Navigates downwards through the menu list and decreases the numeric value when in a function         |  |  |

# **LCD Display**

The Legend 300E Spot features a backlit liquid crystal display (LCD) that provides plenty of information regarding the fixture's settings and status. In addition, the LCD is reversible. This allows reading it normally whether the fixture is on the floor or hanging from a truss





Upon power up, the LCD will show the Legend logo and the fixture identification, as shown on the left figure above. After completing the power up tests, the LCD will show the DMX address, the DMX mode, and the temperature, along with the warning sign if the tests have detected an error.



Press <ENTER> to read the corresponding error message (see *Error Messages* in the *Technical Information* section).

Press <ENTER> while looking at the error messages to clear them.

# **Control Options**

You can set the Legend 300E Spot start address in the 001~512 DMX range. This allows for the control of up to 17 fixtures in the 29-channel Mode 2. The Legend 300E Spot works with any compatible DMX controller using standard DMX cables or the optional W-DMX receiver.

# **Programming**

Carry out all the programming procedures indicated below from the control panel. Refer to the *Menu Map* page to learn how the menu options relate to each other

## **Navigation Buttons**

To enter programming mode, press <MENU> until you see the Main Menu.

To highlight a menu option or to change a setting, press **<UP>** or **<DOWN>**.

To change menu levels as shown in the *Menu Map*, press **<ENTER>** or **<MENU>**. This is equivalent to moving right and left of the Menu Map, respectively.

To accept the current or new value, press <ENTER>.

To return to the previous menu without making changes, press <MENU>.

To exit programming mode, press <MENU> until you see the Main Menu or do not press any button for 30 seconds.



#### **DMX Functions**

From the Main Menu, highlight **DMX Functions** and press **<ENTER>** (a new menu with the DMX functions will open).

### **DMX Address**

- 1) Highlight *DMX Address* (the current address will show).
- 2) Press <MENU> to exit or continue below.
- 3) To change the current address, press **<ENTER>** (a pop up window will open).
  - a) Change the starting address (001~512).
  - b) Accept the new value.

#### **DMX Mode**

- 1) Highlight **DMX Channel Mode** (the current mode will show).
- 2) Press <MENU> to exit or continue below.
- 3) To change the current mode, press <ENTER> (a pop up window will open).
  - a) Select a DMX mode (Mode 1/Mode 2).
  - b) Accept the selected option.

#### **View DMX Values**

- 1) Highlight View DMX Value.
- 2) Press <MENU> to exit or continue below.
- Press <ENTER> (the value for each of the attributes of the current DMX mode will show).
  - a) Scroll along the list to see the values of all the current attributes.
  - b) Return to the previous menu.



The list will show either 17 or 25 attributes, depending on the current DMX mode.

#### W-DMX Settings

- 1) Highlight WDMX Setting
- 2) Press <MENU> to exit or continue below.
- 3) To see the WDMX settings, press <ENTER> (a sub-menu will open).
- 4) Press <MENU> to exit or continue below.
- To activate or deactivate W-DMX, highlight Active (the current setting will show) and press <ENTER> (a pop up window will open).
  - a) Select YES to activate W-DMX or NO to deactivate W-DMX.
  - b) Accept the selected option.
- 6) To enable or disable retransmission, highlight *Retransmit* (the current setting will show) and press <ENTER> (a pop up window will open).
  - a) Select **YES** to enable retransmission or **NO** to deactivate retransmission.
  - b) Accept the selected option.
- 7) To reset the memory, highlight **Reset Memory** and press **<ENTER>** (a pop up window will open).
  - a) Select YES to reset the memory or NO to exit without resetting.
  - b) Accept the selected option.
- 8) Return to the previous menu.



The W-DMX functionality requires the W-DMX transceiver installed on the Legend 300E Spot fixture.



# Fixture Settings

From the Main Menu, highlight *Fixture Settings* and press **<ENTER>** (a new menu with the fixture settings will open).

#### **Reverse Pan Direction**

- 1) Highlight *Pan Inverse* (the current setting will show).
- 2) To reverse the pan direction, press **<ENTER>** (a pop up window will open).
  - a) Select **YES** to reverse the pan direction or **NO** to use the normal pan direction.
  - b) Accept the selected option.

#### **Reverse Tilt Direction**

- 1) Highlight Tilt Inverse (the current setting will show).
- 2) To reverse the tilt direction, press **<ENTER>** (a pop up window will open).
  - a) Select YES to reverse the tilt direction or NO to use the normal tilt direction.
  - b) Accept the selected option.

#### **Head Motion Black Out**

- 1) Highlight **BI.o P/T Moving** (the current setting will show).
- To black out the output when the head moves, press <ENTER> (a pop up window will open).
  - a) Select YES to black out the output when the head tilts or pans, or NO to keep the output on while the head moves.
  - b) Accept the selected option.

### **Color Change Black Out**

- 1) Highlight Bl.o Color Change (the current setting will show).
- 2) To black out the output when the color wheel changes, press **<ENTER>** (a pop up window will open).
  - Select YES to black out the output during a color change or NO to keep the output on to see the color changing.
  - b) Accept the selected option.

### **Gobo Change Black Out**

- 1) Highlight Bl.o Gobo Change (the current setting will show).
- To black out the output when the gobo wheel changes, press <ENTER> (a pop up window will open).
  - a) Select YES to black out the output during a gobo change or NO to keep the output on to see the gobo changing.
  - b) Accept the selected option.



# Lamp Settings

From the Main Menu, highlight Fixture Settings and press <ENTER>.



The lamp will not ignite if the ambient temperature is 104° F (45° C) or higher.

# Lamp On / Off

- 1) Highlight On/Off (the current setting will show).
- 2) To turn the lamp on or off, press **<ENTER>** (a pop up window will open).
  - a) Select ON to turn the lamp on or OFF to turn the lamp off.
  - b) Accept the selected option.

## Lamp Status During Power On

- 1) Highlight State/Power On (the current setting will show).
- To change the lamp status during power on, press <ENTER> (a pop up window will open).
  - a) Select **ON** to turn on the fixture and the lamp simultaneously or **OFF** to turn on the fixture without turning on the lamp.
  - b) Accept the selected option.

#### Remote Turn Off

- 1) Highlight Off Via DMX (the current setting will show).
- 2) To enable/disable remote turn off, press **<ENTER>** (a pop up window will open).
  - Select YES to enable fixture turn off from either a DMX controller or its power switch, or NO to turn the fixture off only from its power switch.
  - b) Accept the selected option.

#### Lamp On if DMX Present

- 1) Highlight On if DMX On (the current setting will show).
- To turn the lamp on when DMX is present, press <ENTER> (a pop up window will open).
  - Select YES to turn the lamp on if DMX signal is present, or NO to turn the lamp on only from the control panel.
  - b) Accept the selected option.

#### Lamp Off if DMX Absent

- 1) Highlight Off if DMX Off (the current setting will show).
- To turn the lamp off when DMX is absent, press <ENTER> (a pop up window will open).
  - Select YES to turn the lamp off if DMX signal is absent, or NO to turn the lamp off only from the control panel.
  - b) Accept the selected option.

### Fan Speed

- 1) Highlight Cooling Mode (the current setting will show).
- 2) To change the fan speed setting, press **<ENTER>** (a pop up window will open).
  - Select AUTO to allow the fixture's controller to set the fan speed, or HIGH to set the fan speed to high mode.
  - b) Accept the new selection.

## **Lamp Strike Delay**

- 1) Highlight Ignition Delay (the current setting will show).
- 2) To set the lamp strike delay, press <ENTER> (a pop up window will open).
  - a) Select the delay before the lamp strikes after power up in seconds (0~255).
  - b) Accept the new value.

# **Fixture Shut Off Delay**

- 1) Highlight Low Power Delay (the current setting will show).
- 2) To set the lamp shut off delay, press **<ENTER>** (a pop up window will open).
  - a) Select the delay before the fixture powers off after lamp off in seconds (0~255).
  - b) Accept the new value.



# **Display Settings**

From the Main Menu, highlight *Display Settings* and press **<ENTER>** (a new menu with the DMX functions will open).

#### **Overturn Display**

- 1) Highlight *Display Inverse* (the current setting will show).
- 2) To overturn the display, press **<ENTER>** (a pop up window will open).
  - Select YES to turn the LCD around (fixture hanging from a truss) or NO to keep the normal LCD view (fixture standing on a surface).
  - b) Accept the selected option.

#### **LCD Backlight Off**

- 1) Highlight Backlight Auto Off (the current setting will show).
- 2) To configure the LCD backlight, press **<ENTER>**.
  - Select YES to automatically turn the LCD backlight off or NO to keep the LCD backlight always on.
  - b) Accept the selected option.

#### **Backlight Brightness**

- 1) Highlight *Backlight Intensity* (the current setting will show).
- 2) To set the backlight brightness, press **<ENTER>** (a pop up window will open).
  - a) Select the backlight brightness (1~10), being "1" the darkest and "10" the brightest settings.
  - b) Accept the new value.

## **Temperature Unit**

- 1) Highlight *Temperature Unit* (the current setting will show).
- 2) To select the temperature unit, press **<ENTER>** (a pop up window will open).
  - Select °C to show the temperature in the Celsius scale or °F to show the temperature in the Fahrenheit scale.
  - b) Accept the selected option.

#### Fixture Tests

From the Main Menu, highlight *Display Settings* and press **<ENTER>** (a new menu with the test functions will open).

#### **Automatic Fixture Test**

- 1) Highlight Auto Test.
- 2) To start the built-in test sequence, press <ENTER>.
  - The fixture will start the test sequence (pan, tilt, color, CMY, gobo selection, gobo rotation, shutter, dimmer, prism activation, prism rotation, frost, zoom, and lamp on/off).
  - b) You can stop the test by pressing **<MENU>**.
  - c) Return to the previous menu.



The automatic fixture test runs only once after activation.

#### **Manual Fixture Test**

- 1) Highlight *Manual Test* and press **<ENTER>** (a sub-menu will open).
- 2) Highlight the desired attribute (the current setting will show).
- To change the value of the selected attribute, press <ENTER> (a pop up window will open).
  - a) Set the attribute value (**000~255**) (the fixture will assume the new attribute value as you change it, as if you were working with a DMX controller).
  - b) Accept the new value.
- 4) Repeat steps 2 and 3 for the other attributes.
- 5) When done with the test, exit to the previous menu (the values of all tested channels will go back to zero).



#### Fixture Information

From the Main Menu, highlight *Fixture Information* and press **<ENTER>** (a new menu with the fixture information will open).

### **Fixture Operation Timer**

1) Highlight *Fixture Use Time* (the accumulated fixture's operation time will show).



You cannot modify or reset the fixture operation timer.

## **Lamp Operation Timer**

- 1) Highlight *Lamp On Time* (the accumulated lamp's operation time will show).
- 2) To reset the lamp operation timer, press **<ENTER>** (a pop up window will open).
  - a) Select Reset Time to reset the timer or Exit to exit without resetting.
  - b) Accept the selected option.

#### **Firmware Version**

- 1) Highlight Firmware Version.
- 2) To see the firmware versions installed, press **<ENTER>** (a sub-menu will open)
  - The display will show the current firmware version for each of the four CPU boards (A through D) in the fixture.
  - b) Return to the previous menu.

### Reset Functions

From the Main Menu, highlight **Reset** and press **<ENTER>** (a new menu with the resettable attributes will open).



You can leave this sub-menu at any time by pressing <MENU>.

#### Pan/Tilt Reset

- 1) Highlight Pan/Tilt and press <ENTER> (a pop up window will open).
  - a) Select **YES** to reset the pan and tilt movements to their home positions.
  - b) Accept the selected option.

### Color/CMY Reset

- 1) Highlight Color/CMY and press <ENTER> (a pop up window will open).
  - a) Select **YES** to reset the color wheel and the CMY filters to their home positions.
  - b) Accept the selected option.

#### **Gobo Reset**

- 1) Highlight *Gobo* and press **<ENTER>** (a pop up window will open).
  - a) Select YES to reset the gobo wheel to its home position.
  - b) Accept the selected option.

## **Shutter/Dimmer Reset**

- 1) Highlight Shutter/Dimmer and press <ENTER> (a pop up window will open).
  - a) Select YES to reset the shutter and dimmer to their home positions.
  - b) Accept the selected option.

## Focus/Zoom/Prism/Frost Reset

- Highlight Focus/Zoom/Prism/Frost and press <ENTER> (a pop up window will open).
  - Select YES to reset the focus, the zoom, the prism, and the frost to their home positions.
  - b) Accept the selected option.

#### Iris/Flatb

- 1) Highlight Iris//Flatb and press <ENTER> (a pop up window will open).
  - a) Select **YES** to reset the iris and flatb to their home positions.
  - b) Accept the selected option.

#### Reset All

- 1) Highlight All and press <ENTER> (a pop up window will open).
  - Select YES to reset all moving optical parts and the moving head to their home positions.
  - b) Accept the selected option.



# Special Functions

From the Main Menu, highlight **Special Functions** and press **<ENTER>** (a new menu with the special functions will open).

### Fixture Maintenance Timers

- Highlight Fixture Maintenance and press <ENTER> (the current maintenance interval and remaining time will show).
- To change the maintenance interval timer, highlight *Interval* and press <ENTER> (a pop up window will open).
  - a) Select the new interval (in hours).
  - b) Accept the new value.
- To reset the remaining time counter, highlight Remain Time and press <ENTER> (a pop up window will open).
  - a) Select **Reset Time** to reset the timer or **Exit** to exit without resetting it.
  - b) Accept the selected option.



It is a good idea to use the Fixture Maintenance Time as a reminder to change the lamp.

#### **Fixture Defaulting**

- 1) Highlight Factory Setting and press <ENTER> (a pop up window will open).
  - Select YES to default the fixture to factory settings, or NO to exit without resetting.
  - b) Accept the selected option and wait for the fixture to reset.
  - c) Return to the previous menu.

# **Offset Mode**

The Offset Mode provides fine adjustments for the home position of all the moving parts in the optical path as well as the pan and tilt movements. This way, when in their home position, the moving parts do not show any border or reduce the light output.

# Entering Offset Mode

- 1) Press <MENU> to enter the regular Menu Mode.
- Press **<ENTER>** for more than three seconds to enter the Offset Mode (the Offset Mode menu will show).
- Pan 1) Select *Pan* and press <ENTER> (a pop up window will open).
  - a) Select the new value (-128~127).
  - b) Accept the new value.
- Tilt 1) Select Tilt and press <ENTER> (a pop up window will open).
  - a) Select the new value (-128~127).
  - b) Accept the new value.

#### Shutter

- 1) Select **Shutter** and press **<ENTER>** (a pop up window will open).
  - a) Select the new value (0~255).
  - b) Accept the new value.

## Dimmer

- 1) Select **Dimmer** and press **<ENTER>** (a pop up window will open).
  - a) Select the new value (0~255).
  - b) Accept the new value.

#### Color

- 1) Select **Color** and press **<ENTER>** (a pop up window will open).
  - a) Select the new value (-128~127).
  - b) Accept the new value.

#### Cyan

- 1) Select *Cyan* and press **<ENTER>** (a pop up window will open).
  - a) Select the new value (0~255).
  - b) Accept the new value.

## Magenta

- 1) Select *Magenta* and press <ENTER> (a pop up window will open).
  - a) Select the new value (0~255).
  - b) Accept the new value.

### Continues on the next page



### Continued from the previous page

Yellow 1) Select Yellow and press <ENTER> (a pop up window will open).

- a) Select the new value (0~255).
- b) Accept the new value.

Gobo 1 1) Select Gobo 1 and press <ENTER> (a pop up window will open).

- a) Select the new value (-128~127).
- b) Accept the new value.

R-Gobo 1 1) Select R-Gobo 1 and press <ENTER>.

- a) Select the new value (-128~127).
- b) Accept the new value.

Gobo 2 1) Select Gobo 2 and press <ENTER> (a pop up window will open).

- a) Select the new value (-128~127).
- b) Accept the new value.

Iris 1) Select Iris and press <ENTER> (a pop up window will open).

- 2) Select the new value (0~255) and press <ENTER>.
- 3) Return to the Offset Mode menu.

Prism 1) Select *Prism* and press **<ENTER>** (a pop up window will open).

- 2) Select the new value (0~255) and press <ENTER>.
- 3) Return to the Offset Mode menu.

R-Prism 1) Select *R-Prism* and press **<ENTER>** (a pop up window will open).

- a) Select the new value (-128~127).
- b) Accept the new value.

Frost 1) Select Frost and press <ENTER> (a pop up window will open).

- a) Select the new value (0~255).
- b) Accept the new value.

Flab 1) Select Flatb and press <ENTER> (a pop up window will open).

- a) Select the new value (0~255).
- b) Accept the new value.

Focus 1) Select Focus and press <ENTER> (a pop up window will open).

- a) Select the new value (0~255).
- b) Accept the new value.

**Zoom** 1) Select **Zoom** and press **<ENTER>** (a pop up window will open).

- a) Select the new value (0~255).
- b) Accept the new value.



# Menu Map

| Main Level                     | 2 <sup>nd</sup> Level  | 3 <sup>rd</sup> Level | 4 <sup>th</sup> Level |  |
|--------------------------------|------------------------|-----------------------|-----------------------|--|
|                                | DMX Address            | 001~512               | N/A                   |  |
|                                | DIAY Champal Mada      | Mode 1 (21-channel)   | N/A                   |  |
|                                | DMX Channel Mode       | Mode 2 (29-channel)   | N/A                   |  |
| DMX Functions                  | View DMX Value         | N/A                   | N/A                   |  |
|                                | WDMX Setting           | Active                |                       |  |
|                                | (Requires optional     | Retransmit            | No/Yes                |  |
|                                | WDMX card)             | Reset Memory          |                       |  |
|                                | Pan Inverse            |                       |                       |  |
|                                | Tilt Inverse           |                       |                       |  |
| Fixture Setting                | Bl. o P/T Moving       | No/Yes                | N/A                   |  |
|                                | Bl. O Color Change     |                       |                       |  |
|                                | Bl. O Gobo Change      |                       |                       |  |
|                                | On/Off                 | 01011                 |                       |  |
|                                | State/Power On         | On/Off                |                       |  |
|                                | Off Via DMX            |                       |                       |  |
|                                | On if DMX On           | No/Yes                |                       |  |
| Lamp Setting                   | Off if DMX Off         |                       | N/A                   |  |
|                                | Cooling Mode           | Auto/High             |                       |  |
|                                | Ignition Delay         | 0~255 s               |                       |  |
|                                | Low Power Delay        | 0~255 s               |                       |  |
|                                | Display Inverse        | N. 67                 | N/A                   |  |
| <b>5</b> 1 <b>6</b> <i>1</i> 1 | Backlight Auto Off     | No/Yes                |                       |  |
| Display Setting                | Backlight Intensity    | 1~10                  | N/A                   |  |
|                                | Temperature Unit       | °C/°F                 |                       |  |
|                                | Auto Test              | 11/0                  | N/A                   |  |
| Fixture Test                   | Manual Test            | N/A                   |                       |  |
|                                | Fixture Use Time       | N/A                   |                       |  |
| Fixture Information            | Lamp On Time           | Exit/Rest Time        | N/A                   |  |
|                                | Firmware Version       | N/A                   |                       |  |
| Reset Functions                | Pan/Tilt               |                       |                       |  |
|                                | Color/CMY              |                       |                       |  |
|                                | Gobo                   |                       |                       |  |
|                                | Shutter/Dimmer         | No/Yes                | N/A                   |  |
|                                | Focus/Zoom/Prism/Frost |                       |                       |  |
|                                | Iris/Flatb             |                       |                       |  |
|                                | All                    |                       |                       |  |
| 0 115 11                       |                        |                       |                       |  |
| Special Functions              | Fixture Maintenance    | Interval/Remain Time  | N/A                   |  |



# **DMX Values**

# Mode 1

| Channel | Function       | Value  | Percent/Setting   |
|---------|----------------|--|---|
| 1       | Pan            | 000 ර 255  | 0~540°  |
| 2       | Pan Fine       | 000 Ó 255  | 0~100%  |
| 3       | Tilt           | 000 Ó 255  | 0~270°  |
| 4       | Tilt Fine      | 000 Ó 255  | 0~100%  |
|         | Pan/Tilt Speed | 000 Ó 255  | Fast~Slow   |
| 6       | Dimmer         | 000 Ó 255  | 0~100%  |
| 7       | Shutter        | 000 \( \phi \) 007<br>008 \( \phi \) 015<br>016 \( \phi \) 131<br>132 \( \phi \) 167<br>168 \( \phi \) 203<br>204 \( \phi \) 239<br>240 \( \phi \) 247<br>248 \( \phi \) 255   | Black out Open Slow~Fast Slow open/Fast close Fast open/Slow close Slow open/Slow close Random strobe Open  |
| 8       | Color          | 000 \$\ightarrow\$ 007 008 \$\ightarrow\$ 015 016 \$\ightarrow\$ 023 024 \$\ightarrow\$ 039 040 \$\ightarrow\$ 047 048 \$\ightarrow\$ 055 056 \$\ightarrow\$ 063 064 \$\ightarrow\$ 128 \$\ightarrow\$ 189 190 \$\ightarrow\$ 193 194 \$\ightarrow\$ 255 | White Red Orange 3,200 K 5,600 K Pink Green Dark Blue Color Mix Fast~Slow CW rotation Stop Slow~Fast CCW rotation   |
| 9       | Cyan           | 000 ර 255  | 0~100%  |
| 10      | Magenta        | 000 ර 255  | 0~100%  |
| 11      | Yellow         | 000 Ó 255  | 0~100%  |
| 12      | Gobo 1         | 000 6 007<br>008 6 014<br>015 6 021<br>022 6 028<br>029 6 035<br>036 6 042<br>043 6 049<br>050 6 057<br>058 6 067<br>068 6 077<br>078 6 087<br>088 6 097<br>098 6 107<br>108 6 117<br>118 6 127<br>128 6 189<br>190 6 193<br>194 6 255                   | Open Gobo 1 Gobo 2 Gobo 3 Gobo 4 Gobo 5 Gobo 6 Gobo 7 Gobo 1 Shaking Gobo 2 Shaking Gobo 3 Shaking Gobo 4 Shaking Gobo 5 Shaking Gobo 5 Shaking Gobo 6 Shaking Gobo 6 Shaking Gobo 7 Shaking Gobo 7 Shaking Fast~Slow CW rotation Stop Slow~Fast CCW rotation |
| 13      | R-Gobo 1       | 000 \( \times \) 127<br>128 \( \times \) 189<br>190 \( \times \) 193<br>194 \( \times \) 255   | Index Fast~Slow CW rotation Stop Slow~Fast CCW rotation   |



# Continued from the previous page

# Mode 1 (Cont.)

| Channel | Function | Value   | Percent/Setting  |
|---------|----------|---|--|
| 14      | Gobo 2   | 000 \$\ightarrow\$ 005 006 \$\ightarrow\$ 010 011 \$\ightarrow\$ 015 016 \$\ightarrow\$ 020 021 \$\ightarrow\$ 036 037 \$\ightarrow\$ 041 042 \$\ightarrow\$ 047 048 \$\ightarrow\$ 057 058 \$\ightarrow\$ 067 068 \$\ightarrow\$ 077 078 \$\ightarrow\$ 087 098 \$\ightarrow\$ 107 108 \$\ightarrow\$ 117 118 \$\ightarrow\$ 189 190 \$\ightarrow\$ 193 194 \$\ightarrow\$ 255 | Open Gobo 8 Gobo 9 Gobo 10 Gobo 11 Gobo 12 Gobo 13 Gobo 14 Gobo 15 Gobo 8 Shaking Gobo 9 Shaking Gobo 10 Shaking Gobo 11 Shaking Gobo 12 Shaking Gobo 13 Shaking Gobo 15 Shaking Gobo 14 Shaking Gobo 15 Shaking Gobo 15 Shaking Fast~Slow CW rotation Stop Slow~Fast CCW rotation   |
| 15      | Focus    | 000 Ó 255   | Near~Far   |
| 16      | Zoom     | 000 Ó 255   | 0~100%   |
| 17      | Prism    | 000 \( \delta \) 008<br>009 \( \delta \) 255  | Normal<br>Prism effect   |
| 18      | R-Prism  | 000 \( \times \) 127<br>128 \( \times \) 189<br>190 \( \times \) 193<br>194 \( \times \) 255  | Index Fast~Slow CW rotation Stop Slow~Fast CCW rotation  |
| 19      | Iris     | 000 ó 255   | 0~100%   |
| 20      | Frost    | 000 Ó 255   | 0~100%   |
| 21      | Function |   | No function Enable BO during Pan or Tilt Disable BO during Pan or Tilt Enable BO during Color change Disable BO during color change Enable BO during gobo change Disable BO during gobo change Disable BO during gobo change Lamp on Pan / Tilt reset Color / CMY reset Gobo 1 / Gobo 2 reset Shutter reset Focus / zoom. / prism / frost reset Iris / flatb reset Reset all No function Lamp off Enable flatb Disable flatb |



# Mode 2

| Channel | Function        | Value  | Percent/Setting   |
|---------|-----------------|--|---|
| 1       | Pan             | 000 Ó 255  | 0~540°  |
| 2       | Pan Fine        | 000 Ó 255  | 0~100%  |
| 3       | Tilt            | 000 Ó 255  | 0~270°  |
| 4       | Tilt Fine       | 000 Ó 255  | 0~100%  |
| 5       | Pan/Tilt Speed  | 000 Ó 255  | Fast~Slow   |
| 6       | Dimmer          | 000 Ó 255  | 0~100%  |
| 7       | Dimmer Fine     | 000 Ó 255  | 0~100%  |
| 8       | Shutter         | 000 \( \phi \) 007<br>008 \( \phi \) 015<br>016 \( \phi \) 131<br>132 \( \phi \) 167<br>168 \( \phi \) 203<br>204 \( \phi \) 239<br>240 \( \phi \) 247<br>248 \( \phi \) 255   | Black out Open Slow~Fast Slow open / fast close Fast open / slow close Slow open / slow close Random strobe Open  |
| 9       | Color           | 000 6 007<br>008 6 015<br>016 6 023<br>024 6 031<br>032 6 039<br>040 6 047<br>048 6 055<br>056 6 063<br>064 6 127<br>128 6 189<br>190 6 193<br>194 6 255   | White Red Orange 3,200 K 5,600 K Pink Green Dark Blue Color Mix Fast~Slow CW rotation Stop Slow~Fast CCW rotation   |
| 10      | Cyan            | 000 Ó 255  | 0~100%  |
| 11      | Magenta         | 000 ó 255  | 0~100%  |
| 12      | Yellow          | 000 Ó 255  | 0~100%  |
| 13      | CMY Speed       | 000 Ó 255  | Fast~Slow   |
| 14      | Gobo 1          | 000 6 007<br>008 6 014<br>015 6 021<br>022 6 028<br>029 6 035<br>036 6 042<br>043 6 049<br>050 6 057<br>058 6 067<br>068 6 077<br>078 6 087<br>088 6 097<br>098 6 107<br>108 6 117<br>118 6 127<br>128 6 189<br>190 6 193<br>194 6 255 | Open Gobo 1 Gobo 2 Gobo 3 Gobo 4 Gobo 5 Gobo 6 Gobo 7 Gobo 1 Shaking Gobo 2 Shaking Gobo 3 Shaking Gobo 4 Shaking Gobo 5 Shaking Gobo 5 Shaking Gobo 5 Shaking Gobo 7 Shaking Fast~Slow CW rotation Stop Slow~Fast CCW rotation |
| 15      | R-Gobo 1        | 000 \( \phi \) 127<br>128 \( \phi \) 189<br>190 \( \phi \) 193<br>194 \( \phi \) 255<br>000 \( \phi \) 255   | Index Fast~Slow CW rotation Stop Slow~Fast CCW rotation 0~100%  |
| 10      | IV-GODO I FIIIE | 1 000 0 200  | 0-10070   |



# Continued from the previous page

Mode 2 (Cont.)

| Channel   Function   Value   Percent/Setting   | Chamai  | From att =     | 1         | Description     |
|--|---------|----------------|-----------|-----------------|
| 17   | Channel | Function       | Value     | Percent/Setting |
| 101   0.015   0.00      |         |                |           | · ·             |
| 17   |         |                |           |                 |
| 17   |         |                |           |                 |
| 17   |         |                |           |                 |
| 17   |         |                |           |                 |
| 17 Gobo 2    Gobo 2  |         |                |           |                 |
| 17   |         |                |           |                 |
| 17   |         |                |           |                 |
| USB  | 47      | 0-1-0          |           | Gobo 8 Shaking  |
| 078  | 17      | Godo 2         | 058 Ó 067 | Gobo 9 Shaking  |
| 088  |         |                | 068 Ó 077 |                 |
| 098  |         |                |           | 3               |
| 108 \( \to \) 117 \( \to \) 127 \( \to \) 180 \( \to \) 183 \( \to \) 193 \( \to \) 255 \( \to \) 189 \( \to \) 255 \( \to \) 193 \( \to \) 255 \( \to \) 193 \( \to \) 255 \( \to \) 194 \( \to \) 255 \( \to \) 194 \( \to \) 255 \( \to \) 197 \( \to \) 193 \( \to \) 197 \( \to \) 198 \( \to \) 198 \( \to \) 197 \( \to \) 198 \( \to \)    |         |                |           |                 |
| 118  |         |                |           |                 |
| 128  |         |                |           |                 |
| 190  |         |                |           | •               |
| 18 Focus   |         |                |           |                 |
| 18   |         |                |           | - · · · ·       |
| 19   | 18      | Focus          | 1         |                 |
| 20  Prism  |         |                |           |                 |
| 21 R-Prism   |         | 200111         | 1         |                 |
| 21 R-Prism   | 20      | Prism          |           |                 |
| 21 R-Prism  128  |         |                | 1         |                 |
| 190   193  |         |                |           |                 |
| 22 R-Prism Fine  | 21      | R-Prism        |           |                 |
| 23    Iris   |         |                |           |                 |
| 24 Frost    000  | 22      | R-Prism Fine   | 000 ර 255 | 0~100%          |
| 24   | 23      | Iris           | 000 Ó 255 | 100~0%          |
| 1008 G   255   | 24      | Front          | 000 Ó 007 | Normal          |
| 25  Pan/Tilt Macro  Pan/Tilt Macro  Pan/Tilt Macro  Acro 1  016 6 023  024 6 031  032 6 039  040 0 047  048 0 055  056 6 063  064 0 071  072 0 079  080 0 087  088 0 095  096 6 103  112 0 119  112 0 127  128 0 135  136 0 143  144 0 151  144 0 151  152 0 159  160 0 167  169 0 175  160 0 167  169 0 175  176 0 183  184 0 191  184 0  |         | riost          | 008 Ó 255 | Frost           |
| 25 Pan/Tilt Macro  Pan/Tilt Macro  1016 6 023  |         |                | 000 ó 007 | Off             |
| 25 Pan/Tilt Macro  Pan/Tilt Macro  1024 6 031  |         |                |           |                 |
| 25  Pan/Tilt Macro  Pan/Tilt Macro  1032   |         |                |           |                 |
| 25  Pan/Tilt Macro  Pan/Tilt Macro  1040 ← 047 048 ← 055 056 ← 063 064 ← 071 072 ← 079 080 ← 087 088 ← 095 109 ← 103 112 ← 119 113 ← 119 114 ← 151 115 ← 159 116 ← 167 117 ← 183 117 ← 183 118 ← 191 119 ← 199 119 ← 199 119 ← 199 119 ← 199 119 ← 199 119 ← 199 110 ← 19  |         |                |           |                 |
| 25 Pan/Tilt Macro Pan |         |                |           |                 |
| 25 Pan/Tilt Macro  Pan/Tilt Macro  056 6 063   |         |                |           |                 |
| 25 Pan/Tilt Macro  064 6 071 072 6 079 080 6 087 088 6 095 Macro 11 096 6 103 Macro 12 104 6 111 112 6 119 Macro 15 128 6 135 Macro 16 136 6 143 Macro 17 144 6 151 Macro 18 152 6 159 Macro 19 160 6 167 Macro 20 169 6 175 Macro 21 176 6 183 Macro 21 184 6 191 Macro 23 184 6 191 Macro 24 200 6 207 Macro 25 Macro 26 216 6 223 Macro 27 224 6 231 Macro 28 232 6 239 Macro 29 240 6 247 Macro 29  |         |                |           |                 |
| 25 Pan/Tilt Macro  Pan/Tilt Ma |         |                |           |                 |
| 25 Pan/Tilt Macro  Pan/Tilt Ma |         |                |           |                 |
| 25 Pan/Tilt Macro Pan/Tilt Macro  Pan/Tilt Mac |         |                |           |                 |
| 25 Pan/Tilt Macro  Pan/Tilt Macro  1096 \( \times \) 111 112 \( \times \) 119 120 \( \times \) 127 128 \( \times \) 135 136 \( \times \) 143 144 \( \times \) 151 152 \( \times \) 159 160 \( \times \) 167 169 \( \times \) 175 176 \( \times \) 183 184 \( \times \) 191 192 \( \times \) 199 192 \( \times \) 199 192 \( \times \) 237 193 \( \times \) 184 \( \times \) 237 194 \( \times \) 237 195 \( \times \) 184 \( \times \) 237 196 \( \times \) 237 197 \( \times \) 184 \( \times \) 237 198 \( \times \) 215 198 \( \times \) 237 198 \( \times \) 238 198 \( \times \) 238 198 \( \times \) 239 198 \( \times \) 247 198 \( \times \) 237 198 \( \times \) 237 198 \( \times \) 238 \( \times \) 238 \( \times \) 237 198 \( \times \) 238  |         |                |           |                 |
| 25 Pan/Tilt Macro  104 6 111   Macro 13   Macro 14   120 6 127   128 6 135   Macro 16   136 6 143   Macro 17   144 6 151   Macro 18   152 6 159   Macro 19   160 6 167   Macro 20   169 6 175   Macro 21   176 6 183   Macro 22   184 6 191   Macro 23   192 6 199   Macro 24   200 6 207   Macro 25   216 6 223   Macro 27   224 6 231   Macro 28   232 6 239   Macro 29   240 6 247   Macro 30   |         |                |           |                 |
| 25 Pan/Tilt Macro  120 \( \times 135 \) 136 \( \times 143 \) 144 \( \times 151 \) 152 \( \times 159 \) 160 \( \times 167 \) 169 \( \times 175 \) 176 \( \times 183 \) 184 \( \times 191 \) 192 \( \times 199 \) 192 \( \times 231 \) 192 \( \tim |         | Pan/Tilt Macro |           |                 |
| 128 Ó 135   Macro 16   Macro 17   Macro 18   152 Ó 159   Macro 19   Macro 20   Macro 21   176 Ó 183   Macro 22   184 Ó 191   Macro 24   Macro 25   208 Ó 215   Macro 26   216 Ó 223   Macro 27   224 Ó 231   Macro 28   232 Ó 247   Macro 29   Macro 30   Mac |         |                |           |                 |
| 128 O 135 136 O 143 Macro 16 Macro 17 144 O 151 Macro 18 152 O 159 Macro 19 Macro 20 169 O 175 Macro 21 176 O 183 Macro 22 184 O 191 Macro 23 184 O 191 Macro 24 200 O 207 Macro 25 208 O 215 Macro 27 224 O 231 Macro 27 224 O 231 Macro 28 232 O 239 Macro 29 240 O 247 Macro 30   | 25      |                |           |                 |
| 144 \( \circ \) 151 152 \( \circ \) 159 160 \( \circ \) 167 169 \( \circ \) 175 176 \( \circ \) 183 Macro 21 176 \( \circ \) 183 Macro 22 184 \( \circ \) 191 Macro 23 192 \( \circ \) 199 Macro 24 200 \( \circ \) 207 Macro 25 Macro 26 216 \( \circ \) 223 Macro 26 216 \( \circ \) 223 Macro 27 224 \( \circ \) 231 Macro 28 232 \( \circ \) 239 Macro 29 240 \( \circ \) 247 Macro 30   | _5      |                |           |                 |
| 152 \( \times \) 159 160 \( \times \) 167 169 \( \times \) 175 176 \( \times \) 183 184 \( \times \) 191 192 \( \times \) 199 192 \( \times \) 207 208 \( \times \) 215 216 \( \times \) 223 Macro 25 208 \( \times \) 215 Macro 26 216 \( \times \) 223 Macro 27 224 \( \times \) 231 Macro 27 224 \( \times \) 231 Macro 28 232 \( \times \) 239 240 \( \times \) 247 Macro 30   |         |                |           |                 |
| 160 \( \times \) 167 169 \( \times \) 175 176 \( \times \) 183 184 \( \times \) 191 192 \( \times \) 199 192 \( \times \) 207 208 \( \times \) 215 216 \( \times \) 223 Macro 25 208 \( \times \) 215 Macro 26 216 \( \times \) 223 Macro 27 224 \( \times \) 231 Macro 27 224 \( \times \) 231 Macro 28 232 \( \times \) 239 240 \( \times \) 247 Macro 30  |         |                |           |                 |
| 169 \( \circ \) 175 176 \( \circ \) 183 184 \( \circ \) 191 192 \( \circ \) 199 192 \( \circ \) 199 200 \( \circ \) 207 208 \( \circ \) 215 216 \( \circ \) 223 Macro 27 224 \( \circ \) 231 232 \( \circ \) 239 240 \( \circ \) 247 Macro 30  |         |                |           |                 |
| 176 \( \to \) 183  184 \( \to \) 191  192 \( \to \) 199  200 \( \to \) 207  208 \( \to \) 215  216 \( \to \) 223  224 \( \to \) 231  232 \( \to \) 239  240 \( \to \) 247  Macro 22  Macro 25  Macro 26  Macro 27  Macro 27  Macro 28  Macro 29  Macro 29  Macro 30  |         |                |           |                 |
| 184 \( \times \) 191 192 \( \times \) 199 200 \( \times \) 207 208 \( \times \) 215 216 \( \times \) 223 224 \( \times \) 231 232 \( \times \) 239 240 \( \times \) 247 Macro 23 Macro 25 Macro 26 Macro 27 Macro 27 Macro 28 Macro 29 Macro 30  |         |                |           |                 |
| 192 \( \times 199 \) 200 \( \times 207 \) 208 \( \times 215 \) 216 \( \times 223 \) 224 \( \times 231 \) 232 \( \times 239 \) 240 \( \times 247 \) Macro 24 Macro 25 Macro 26 Macro 27 Macro 28 Macro 28 Macro 29 Macro 30   |         |                |           |                 |
| 200 \( \times \) 207   Macro 25   Macro 26   216 \( \times \) 223   Macro 27   224 \( \times \) 231   Macro 28   232 \( \times \) 239   240 \( \times \) 247   Macro 30  |         |                |           |                 |
| 208 \( \times 215 \) 216 \( \times 223 \) 224 \( \times 231 \) 232 \( \times 239 \) 240 \( \times 247 \) Macro 28  Macro 29  Macro 30  |         |                |           |                 |
| 216 $\circlearrowleft$ 223 Macro 27<br>224 $\circlearrowleft$ 231 Macro 28<br>232 $\circlearrowleft$ 239 Macro 29<br>240 $\circlearrowleft$ 247 Macro 30   |         |                |           |                 |
| 224 $\circlearrowleft$ 231 Macro 28<br>232 $\circlearrowleft$ 239 Macro 29<br>240 $\circlearrowleft$ 247 Macro 30  |         |                |           |                 |
| 232 $\circlearrowleft$ 239 Macro 29 Macro 30   |         |                |           |                 |
| 240 ó 247 Macro 30   |         |                |           |                 |
| 248 \( \delta \) 255   Macro 31  |         |                |           | Macro 30        |
|  |         |                | 248 ó 255 | Macro 31        |

## Continues on the next page



# Continued from the previous page

# Mode 2 (Cont.)

| Channel | Function        | Value   | Percent/Setting   |
|---------|-----------------|---|---|
| 26      | P/T Macro Speed | 000 ර 255   | Fast~Slow   |
| 27      | Preset Color    | 000 6 021<br>022 6 042<br>043 6 063<br>064 6 085<br>086 6 106<br>107 6 127<br>128 6 148<br>149 6 170<br>171 6 191<br>192 6 212<br>213 6 233<br>234 6 255  | White Color 1 Color 2 Color 3 Color 4 Color 5 Color 6 Color 7 Color 8 Color 9 Color 10 Color 11   |
| 28      | Color Macro     | 000 6 007<br>008 6 028<br>029 6 049<br>050 6 069<br>070 6 090<br>091 6 110<br>111 6 131<br>132 6 152<br>153 6 173<br>174 6 194<br>195 6 215<br>216 6 235<br>236 6 255                           | Open Macro 1 Macro 2 Macro 3 Macro 4 Macro 5 Macro 6 Macro 7 Macro 8 Macro 9 Macro 10 Macro 11 Macro 12   |
| 29      | Function        | 000 6 069<br>070 6 079<br>080 6 089<br>090 6 099<br>100 6 109<br>110 6 129<br>130 6 139<br>140 6 149<br>150 6 159<br>170 6 179<br>180 6 189<br>190 6 199<br>200 6 209<br>210 6 229<br>230 6 249 | No function Enable BO during Pan or Tilt Disable BO during Pan or Tilt Enable BO during Color change Disable BO during color change Enable BO during gobo change Disable BO during gobo change Disable BO during gobo change Lamp on Pan / Tilt reset Color / CMY reset Gobo 1 / Gobo 2 reset Shutter reset Focus / zoom / prism / frost reset Iris / flatb reset Reset all No function Lamp off Enable Flatb Disable Flatb |



# 5. Technical Information

# General Maintenance

To maintain optimum performance and minimize wear, the user should clean the light fixtures frequently. Usage and environment are contributing factors in determining the cleaning frequency. As a rule, the user should clean the fixtures at least twice a month. Dust build up reduces light output performance and can cause overheating. This can lead to reduced light source life and increased mechanical wear.

CHAUVET® recommends cleaning the fixture's external optics with a soft cloth using normal glass cleaning fluid.

To clean a fixture, follow the recommendations below:

- · Unplug the fixture from power.
- Wait until the fixture is cold.
- Use a vacuum (or dry compressed air) and a soft brush to remove dust collected on the external vents and reachable internal components.
- Clean all external optics and glass surfaces with a mild solution of glass cleaner or isopropyl alcohol, and a soft, lint free cotton cloth or a lens cleaning tissue.
- Apply the solution directly to the cloth or tissue and drag any dirt and grime to the outside of the lens.
- · Gently polish the external glass surfaces until they are free of haze and lint.
- When cleaning units with a movable mirror, you should keep the contact with the mirror surface to a minimum to avoid scratching or damaging it.

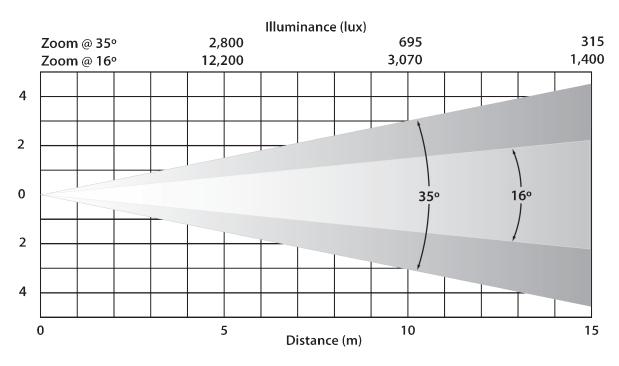


Always dry the external optics and glass surfaces carefully after cleaning them.



If the fixture has one or more fans, refrain from spinning them using compressed air.

# **Photometrics**





# **Error Messages**

| Message   | Cause(s)  | Action(s)   |
|---|---|---|
| Lamp Startup Fail   | The lamp has not started after being struck   | Check lamp     Check lamp socket and wiring     Check ballast and igniter   |
| Temperature Sense<br>Error  | No communication with temperature sensor  | Check sensor wiring     Check sensor integrity     Check control board  |
| Lamp too Hot Low<br>Power   | Ambient temperature higher than 105° C; lamp in low power for safety                | <ul><li>Check fans</li><li>Check fan wiring</li><li>Clean vents</li></ul>   |
| Lamp Too Hot Power Off  | Ambient temperature higher than 110° C; lamp off for safety                         | <ul><li>Check fans</li><li>Check fan wiring</li><li>Clean vents</li></ul>   |
| Maintenance Fixture   | Fixture Maintenance timer expired   | Proceed with maintenance and reset timer  |
| Lamp On Over 700 Hour   | Lamp change is overdue  | · Change lamp   |
| Memory Initial Fail   | Memory chip error   | Change main board   |
| CPU-B Error<br>CPU-C Error<br>CPU-D Error   | No communication with auxiliary CPU   | Check sensors wiring and position     Check stepper motor, belt, and driver board     Check control boards  |
| Pan Reset Error Pan Encode Error Tilt Reset Error Tilt Encode Error   | Moving head failed going to home position after power up or fixture reset           | <ul> <li>Check moving head's free movement</li> <li>Check sensors' wiring and position</li> <li>Check stepper motor, belt, and driver board</li> <li>Check the corresponding control board</li> <li>Check main control board</li> </ul> |
| Shutter Reset Fail Dimmer Reset Fail Color Reset Fail Cyan Reset Fail Magenta Reset Fail Yellow Reset Fail Gobo Reset Fail R-Gobo Reset Fail Effect Reset Fail Frost Reset Fail | Indicated moving part failed going to home position after power up or fixture reset | Check part's free movement and integrity     Check sensors' wiring and position     Check stepper motor, belt, and driver board     Check the corresponding control board     Check main control board                                  |



# **Troubleshooting Guide**

| Symptom                                     | Cause(s)                              | Action(s)   |
|---|---------------------------------------|---|
|   | · No power on outlet                  | Repair outlet problem or use another outlet   |
|   | · Blown fuse                          | Replace blown fuse with same type and rating fuse   |
| Fixture does not power up                   | · Bad power cord/plug                 | · Repair or replace power cord/plug   |
|   | · Bad power switch                    | · Replace power switch  |
|   | · Bad power supply                    | · Replace power supply  |
|   | · Bad main controller                 | · Replace main controller   |
| Fixture powers up but                       | State/Power On parameter set to NO    | · Change parameter to YES   |
| lamp does not ignite                        | · Lamp temperature problems           | · Check error messages and follow instructions  |
|   | · Lamp problems                       | · Check error messages and follow instructions  |
|   | · Dimmer not at full output           | · Adjust dimmer value   |
|   | · Lamp still cold                     | Wait for lamp to come up with full output temperature                                       |
| Lamp ignited but has low                    | · CTC or CMY filter interfering       | · Set color wheel or filter to home position  |
| intensity/color<br>temperature              | · Defective or old lamp               | · Replace lamp  |
|   | · Misaligned lamp                     | · Realign lamp  |
|   | · Defective lamp wires or socket      | · Repair/change wiring or socket  |
|   | · Defective ballast                   | · Replace ballast   |
|   | · Defective or old lamp               | · Replace lamp  |
| Lamp flickers or turns off                  | · Temperature problems                | · Check error messages and follow instructions  |
| by itself                                   | · Defective lamp wires or socket      | · Repair/change wiring or socket  |
|   | · Defective ballast                   | · Replace ballast   |
| Circuit breaker/fuse keeps                  | Excessive circuit load                | · Check total load placed on the electrical circuit   |
| tripping/blowing                            | · Short circuit along the power wires | · Check for a short in the electrical wiring  |
|   | · Wrong DMX addressing                | · Check DMX mode and starting DMX address   |
| Fixture does not recovered                  | · Damaged DMX cables                  | · Check DMX cables  |
| Fixture does not respond to DMX when nearby | · Wrong polarity on the controller    | · Check polarity switch settings on the controller  |
| fixtures on the same universe do            | · Loose DMX cables                    | · Check cable connections   |
| universe de                                 | · Faulty DMX interface                | · Replace the Main board  |
|   | · Faulty Display/Main board           | · Replace the Main board  |
|   | · Non DMX cables                      | · Use only DMX compatible cables  |
|   | · Bouncing signals                    | · Install terminator as suggested   |
| DMX signal problems<br>(see Appendix > DMX  | · Long cable / low level signal       | Install an optically coupled DMX splitter right after<br>the fixture with the strong signal |
| Primer)                                     | · Too many fixtures                   | Install an optically coupled DMX splitter after unit #32 or before                          |
|   | · Interference from AC wires          | Keep DMX cables separated from power cables of<br>fluorescent/black lights                  |



If you still experience technical problems after trying the above solutions, contact  ${\tt CHAUVET@Technical\ Support.}$ 



# Returns Procedure

The user must send the merchandise prepaid, in the original box, and with its original packing and accessories. CHAUVET® will not issue call tags.

Call CHAUVET® and request a Return Merchandise Authorization Number (RMA #) before shipping the fixture. Be prepared to provide the model number, serial number, and a brief description of the cause for the return.

The user must clearly label the package with a Return Merchandise Authorization Number (RMA #). CHAUVET® will refuse any product returned without an RMA #.



DO NOT write the RMA # directly on the box. Instead, write it on a properly affixed label

Once you receive the RMA #, please include the following information on a piece of paper inside the box:

- · Your name
- Your address
- · Your phone number
- · The RMA #
- A brief description of the problem

Be sure to pack the fixture properly. Any shipping damage resulting from inadequate packaging will be the customer's responsibility. As a suggestion, proper UPS packing or double-boxing is always a safe method to use.



CHAUVET® reserves the right to use its own discretion to repair or replace returned product(s).

# **Claims**

The carrier is responsible for any damage incurred during shipping. Therefore, if the received merchandise appears to have damages caused during shipping, the customer must submit the damage report and any related claims with the carrier, not CHAUVET®. The customer must submit the report upon reception of the damaged merchandise. Failure to do so in a timely manner may invalidate the customer's claim with the carrier.

For other issues such as missing components or parts, damage not related to shipping, or concealed damage, the customer must make claims to CHAUVET® within seven (7) days of receiving the merchandise.

## Contact Us

## **World Headquarters**

General Information

**CHAUVET®** 

5200 NW 108th Avenue Sunrise, FL 33351 Voice: (954) 929-1115 Fax: (954) 929-5560 Toll free: (800) 762-1084

Technical Support

Voice: (954) 929-1115 (Press 4)

Fax: (954) 756-8015

World Wide Web

www.chauvetlighting.com



# **Technical Specifications**

| Waight 9 dimensions                              |  |
|--|--|
| Weight & dimensions                              | 14 F in (270 mm)                       |
| Length   |  |
| Width  |  |
| Height   |  |
| Weight   | 47.5 IDS (21.55 kg)                    |
| Power  |  |
| Auto-ranging                                     | 100~240 V. 50/60 Hz                    |
| Operating current @ 120 V, 60 Hz                 | 4.12 A                                 |
| Operating current @ 230 V, 50 Hz                 |  |
| Inrush current @ 120 V, 60 Hz                    |  |
| Inrush current @ 230 V, 50 Hz                    | 1.6 A                                  |
| Power consumption @ 120 V, 60 Hz                 | 477 W                                  |
| Power consumption @ 230 V, 50 Hz                 | 468 W                                  |
| Power factor @ 120 V, 60 Hz                      |  |
| Power factor @ 230 V, 50 Hz                      |  |
| Fuse   | Glass, 20 mm, T 10 A, 250 V (external) |
| Light source                                     |  |
| Type   |  |
| Approved lamp                                    |  |
| Socket   | MiniFastFit™                           |
| Head Motion Range                                |  |
| Pan  | 540°                                   |
| Tilt   | 270°                                   |
| Thermal  |  |
| Maximum ambient temperature                      | 104° E (40° C)                         |
| Maximum surface temperature                      |  |
| Maximum Surface temperature                      | 195 1 (57 6)                           |
| Photo Optic                                      |  |
| Illuminance at 5 m (16° zoom)                    | 12 200 lux                             |
| Illuminance at 5 m (35° zoom)                    |  |
|  | ·                                      |
| Gobo Wheel 1                                     |  |
| Outer diameter                                   |  |
| Image diameter                                   |  |
| Thickness  |  |
| Material   | glass                                  |
| Gobo Wheel 2                                     |  |
| Outer diameter                                   | 31.42 mm                               |
| Image diameter                                   |  |
| Thickness  |  |
| Material   | steel                                  |
| 0 / 10 0   |  |
| Control & Programming                            |  |
| Data input                                       |  |
| Data output                                      | locking 3 and 5-pin XLR female socket  |
| Data pin configuration                           |  |
| Protocols  |  |
| DMX Channels                                     | 21 and 29                              |
| Ordering Information                             |  |
| Legend 300E Spot                                 | LEGEND300SPOT                          |
| Two Legend 300E Spot units in a single road case |  |
| Managaranta Information                          |  |
| Warranty Information                             | O Basis ad                             |
| Warranty duration                                | ∠-vear ilmited warrantv                |

