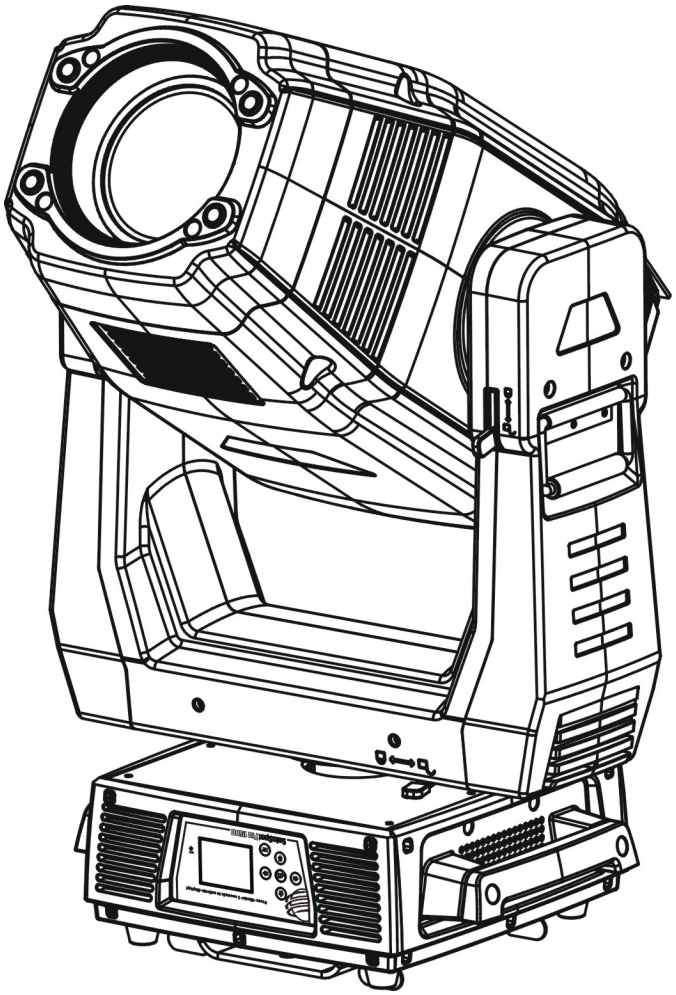
HIGH END SYSTEMS

Professional Moving Head User Manual



SolaSpot Pro 1500

Version 1.0.0

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Welcome

Notice

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Contacting High End Systems ®

Sales Department	High End Systems, Inc. 2105 Gracy Farms Lane Austin, TX 78758 USA voice:512.836.2242 fax:512.837.5290 Toll Free: 800.890.8989
Customer Service	High End Systems, Inc. 2105 Gracy Farms Lane Austin, TX 78758 USA voice:800.890.8989 fax: 512.834.9195 toll free: 800.890.8989 email: support@highend.com
World Wide Web	http://www.highend.com

Declaration of Conformity

according to ISO/IEC Guide 22 and EN45104

Manufacturer's name: **High End Systems, Inc.**

Distributor's name: **High End Systems, Inc.**

Distributor's address: **2105 Gracy Farms Lane**
Austin, Texas 78758 USA

Declares that the product

Product Name: **Axon**

Product Number: **All**

Product Options: **All**

conforms to the following EEC directives:

73/23/EEC, as amended by 93/68/EEC
89/336/EEC, as amended by 92/31/EEC and 93/68/EEC

Equipment referred to in this declaration of conformity was first manufactured in compliance with the following standards in 2005:

Safety: EN 60598-1: 1997
EN 60598-2-17: 1990
A1-A3: 1998
A13: 1999

EMC:

EN 55022
Conducted Emissions Class A
Radiated Emissions Class A
ANSI C63.4 Class A
FCC 47 CFR Part 15 Class A
VCCI V-1/2001.04 Class A

EN 55024
EN 61000-4-2 4/8kV
EN 61000-4-3 A1 3V/m
EN 61000-4-4 1kV/0.5kV
EN 61000-4-5 2kV/1kV
EN 61000-4-6 3 Vrms
EN 61000-4-11 >95%-0.5p, 30%-25p,>95%-250p

EN 61000-3-2 Class A
EN 61000-3-3

USA, Thursday, January 16, 2014
Kenneth Stuart Hansen, Compliance Engineer

FCC Information

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

Patents

This High End Systems product is protected by patents and pending patent applications.

Patents owned or licensed by High End Systems include:

US 4,392,187; US 4,602,321; US 4,688,161; US 4,701,833; US 4,709,311; US 4,779,176; US 4,800,474; US 4,962,687; US 4,972,306; US 4,980,806; US 5,010,459; US 5,031,078; US 5,073,847; US 5,078,039; US 5,186,536; US 5,209,560; US 5,278,742; US 5,282,121; US 5,307,295; US 5,329,431; US 5,331,822; US 5,367,444; US 5,402,326; US 5,414,328; US 5,426,576; US 5,430,629; US 5,432,691; US 5,454,477; US 5,455,748; US 5,502,627; US 5,506,762; US 5,515,254; US 5,537,303; US 5,545,951; US 5,588,021; US 5,590,954; US 5,590,955; US 5,640,061; US 5,647,662; US 5,691,886; US 5,702,082; US 5,728,994; US 5,758,955; US 5,758,956; US 5,769,527; US 5,769,531; US 5,774,273; US 5,788,365; US 5,794,881; US 5,795,058; US 5,798,619; US 5,806,951; US 5,812,596; US 5,823,661; US 5,825,548; US 5,828,485; US 5,829,868; US 5,857,768; US 5,882,107; US 5,921,659; US 5,934,794; US 5,940,204; US 5,945,786; US 5,953,151; US 5,953,152; US 5,969,485; US 5,980,066; US 5,983,280; US 5,984,248; US 5,986,201; US 6,011,662; US 6,029,122; US 6,048,080; US 6,048,081; US 6,054,816; US 6,057,958; US 6,062,706; US 6,079,853; US 6,126,288; US 6,142,652; US 6,142,653; US 6,172,822; US 6,175,771; US 6,188,933; US 6,208,087; US 6,219,093; US 6,220,730; US 6,241,366; US 6,249,091; US 6,255,787; US 6,256,136; US 6,261,636; US 6,278,542; US 6,278,545; US 6,278,563; US 6,288,828; US 6,326,741; US 6,327,103; US 6,331,756; US 6,346,783; US 6,421,165; US 6,430,934; US 6,459,217; US 6,466,357; US 6,502,961; US 6,515,435; US 6,523,353; US 6,536,922; US 6,538,797; US 6,545,586; US 6,549,324; US 6,549,326; US 6,563,520; US 6,565,941; US 6,570,348; US 6,575,577; US 6,578,991; US 6,588,944; US 6,592,480; US 6,597,132; US 6,600,270; US 6,601,974; US 6,605,907; US 6,617,792; US 6,621,239; US 6,622,053; US 6,635,999; US 6,648,286; US 6,664,745; US 6,682,031; US 6,693,392; US 6,696,101; US 6,719,433; US 6,736,528; US 6,771,411; US 6,775,991; US 6,783,251; US 6,801,353; US 6,812,653; US 6,823,119; US 6,865,008; US 6,866,390; US 6,866,402; US 6,866,451; US 6,869,193; US 6,891,656; US 6,894,443; US 6,919,916; US 6,930,456; US 6,934,071; US 6,937,338; US 6,955,435; US 6,969,960; US 6,971,764; US 6,982,529; US 6,988,805; US 6,988,807; US 6,988,817; US 7,000,417; US 7,011,429; US 7,018,047; US 7,020,370; US 7,033,028; US 7,048,838; US 7,055,963; US 7,055,964; US 7,057,797; US 7,073,910; US 7,078,869; US 7,092,098; US 7,119,902; US 7,161,562; US 7,175,317; US 7,181,112; US 7,206.023; US 7,210,798; US 7,253,942; US D347,113; US D350,408; US D359,574; US D360,404; US D365,165; US D366,712; US D370,080;

US D372,550; US D374,439; US D377,338; US D381,740; US D409,771; AT E169413; CA 2142619; CA 2145508;

CA 2245842; DE 22588.4-08; DE 621495; DE 655144; DE 69320175.4; DE 69322401.0; DE 69331145.2; DE 69525856.7;

DE 69734744.3; DE 797503; DK 0655144; DK 1447702; EP 0475082; EP 0621495; EP 0655144; EP 0662275;

EP 0767398; EP 0797503; EP 0969247; EP 1447702; ES 0621495; FR 0621495; FR 0655144; FR 0662275;

FR 1447702; GB 2043769B; GB 2055842B; GB 2283808B; GB 2290134B; GB 2291814B; GB 2292530B;

GB 2292896B; GB 2294909B; GB 2295058B; GB 2303203B; GB 2306887B; GB 2307036B; GB 2316477B; IE 0621495;

IT 034244BE; 2005; IT 0621495; IT 0655144; JP 3495373; JP 3793577; NL 0621495; NL 0797503; NL 0969247;

UK 0621495; UK 0655144; UK 0662275; UK 0797503; UK 0969247; UK 1447702;

Product Modification Warning

High End Systems products are designed and manufactured to meet the requirements of United States and International safety regulations. Modifications to the product could affect safety and render the product non-compliant to relevant safety standards.

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Les produits High End Systems sont conçus et fabriqués conformément aux exigences des règlements internationaux de sécurité. Toute modification du produit peut entraîner sa non conformité aux normes de sécurité en vigueur.

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I prodotti di High End Systems sono stati progettati e fabbricati per soddisfare i requisiti delle normative di sicurezza statunitensi ed internazionali. Qualsiasi modifica al prodotto potrebbe pregiudicare la sicurezza e rendere il prodotto non conforme agli standard di sicurezza pertinenti.

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Los productos de High End Systems están diseñados y fabricados para cumplir los requisitos de las reglamentaciones de seguridad de los Estados Unidos e internacionales. Las modificaciones al producto podrían afectar la seguridad y dejar al producto fuera de conformidad con las normas de seguridad relevantes.

Warranty Information

Limited Warranty

Unless otherwise stated, your product is covered by a one year parts and labor limited warranty. Dichroic filters and LithoPatterns® high resolution glass gobos are not guaranteed against breakage or scratches to coating. It is the owner's responsibility to furnish receipts or invoices for verification of purchase, date, and dealer or distributor. If purchase date cannot be provided, date of manufacture will be used to determine warranty period.

Returning an Item Under Warranty for Repair

It is necessary to obtain a Return Material Authorization (RMA) number from your dealer or point of purchase BEFORE any units are returned for repair. The manufacturer will make the final determination as to whether or not the unit is covered by warranty.

A fixture must be returned in its original packaging. Any other parts returned to High End Systems must be packaged in a suitable manner to ensure the protection of such product unit or parts, and such package shall be clearly and prominently marked to indicate that the package contains returned Product units or parts and with an RMA number. Accompany all returned Product units or parts with a written explanation of the alleged problem or malfunction. Ship returned Product units or parts to: 2105 Gracy Farms Lane, Austin, TX 78758 USA.

Note:Freight Damage Claims are invalid for fixtures shipped in non-factory boxes and packing materials.

Freight

All shipping will be paid by the purchaser. Items under warranty shall have return shipping paid by the manufacturer only in the Continental United States. Under no circumstances will freight collect shipments be accepted. Prepaid shipping does not include rush expediting such as air freight. Air freight can be sent customer collect in the Continental United States.

REPAIR OR REPLACEMENT AS PROVIDED FOR UNDER THIS WARRANTY IS THE EXCLUSIVE REMEDY OF THE CONSUMER. HIGH END SYSTEMS, INC. MAKES NO WARRANTIES, EXPRESS OR IMPLIED, WITH RESPECT TO ANY PRODUCT, AND HIGH END SPECIFICALLY DISCLAIMS ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. HIGH END SHALL NOT BE LIABLE FOR ANY INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGE, INCLUDING LOST PROFITS, SUSTAINED OR INCURRED IN CONNECTION WITH ANY PRODUCT OR CAUSED BY PRODUCT DEFECTS OR THE PARTIAL OR TOTAL FAILURE OF ANY PRODUCT REGARDLESS OF THE FORM OF ACTION, WHETHER IN CONTRACT, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY OR OTHERWISE, AND WHETHER OR NOT SUCH DAMAGE WAS FORESEEN OR UNFORESEEN.

Warranty is void if the product is misused, damaged, modified in any way, or for unauthorized repairs or parts. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Important Safety Information

Instructions pertaining to continued protection against fire, electric shock, and injury to persons are found throughout this manual. Please read all instructions prior to assembling, mounting, and operating this equipment.

The following international caution and warning symbols appear in margins throughout this manual to highlight messages.



This symbol appears adjacent to Caution messages. Not heeding these messages could result in personal injury and/or damage to equipment.



This symbol appears adjacent to high voltage warning messages. Not heeding these messages could result in serious personal injury.

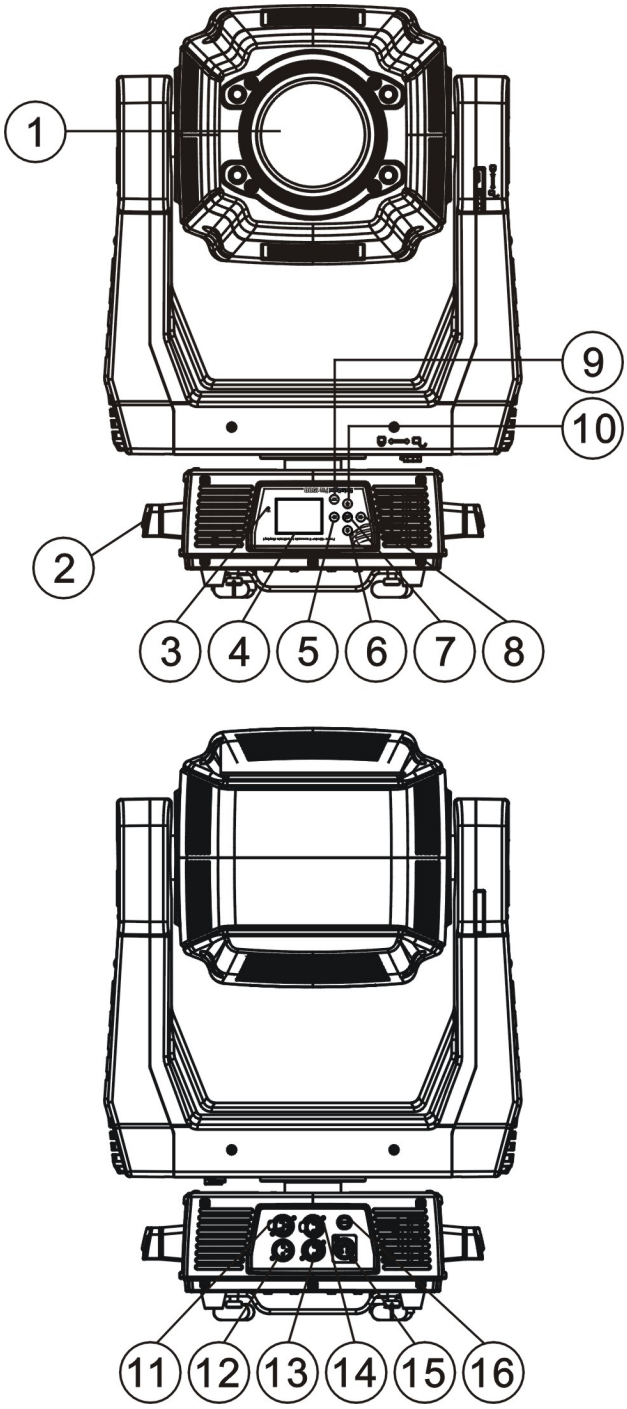


This symbol cautions against mounting the fixture on or near a flammable surface.



This symbol indicates that, while operating, equipment surfaces may reach very high temperatures. Allow the fixture to cool before handling.

Fixture Overview



1: Lens
2: Handle
3: Microphone
4: Display
5: Left-button
6: Down-button
7: ENTER-button
8: Right-button
9: Mode/Esc-button
10: Up-button
11: 5-Pin DMX out
12: 5-Pin DMX in
13: 3-Pin DMX in
14: 3-Pin DMX out
15: Power supply
16: Fuse

This page intentionally left blank to ensure new chapters start on right (odd number) pages.

Features

•DMX Channels mode: 48 channels

•Stand alone operation with Master/Slave function, sound activated via built in microphone.

•Pan and tilt movement: 8 and 16 bit resolution

For smooth and precise motion

Movement: Pan: 540°/630°optional, Tilt: 265°

Speed of pan/tilt movement adjustable

Scan position memory, auto reposition after unexpected movement

•Colors: Basic color wheel with 6 dichroic mirrors, plus white, two direction rainbow effect.

•CMY & CTO Variable Color Mixing for Infinite Color Possibilities

•Rotation gobo: 6 interchangeable, rotating gobos plus open

•Gobo wheel with 7 interchangeable gobos plus open, gobo shaking in different speed

•Dimmer intensity from 0%~100%

•Prism and prism rotating , with 16 prism macros

•Iris from 5%~100% with pulse iris effect.

•Stepless frost, 0%~100% linear change frost

•Control board with full color LCD graphic display and touch-keyboard

•Display: Can be changed 180° reverse to fit for different installation position.

•Strobe/shutter: High speed shutter, 0-13 Hz or random strobe

•Rechargeable Back up Battery for Display, no need external power supply, enable users to enter display menu for address setting or access other functions setting.

•Software-upload by optional accessory via DMX line

Safety Considerations



CAUTION: The information in this chapter is intended to assist qualified personnel *only*.



WARNING: Disconnect power before servicing. Replace fuses with the specified type and rating only.

This device has left the factory in perfect condition. In order to maintain this condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this user manual.

Important:

Damages caused by the disregard of this user manual are not subject to warranty. The dealer will not accept liability for any resulting defects or problems.

- If the device has been exposed to temperature changes due to environmental changes, do not switch it on immediately. The condensation could cause damage to the device. Leave the device switched off until it has reached room temperature.
- This device falls under protection-class I. Therefore it is essential that the device be earthed.
- The electrical connection must carry out by a qualified person.
- Make sure that the available voltage is within stated range.
- Make sure the power cord is never crimped or damaged by a sharp edge. Replace cable immediatly if damaged, this work must be done by an authorized dealer.
- Always disconnect from power, when the device is not in use or before cleaning it. Only handle the power cord by the plug. Never pull out the plug by tugging the power cord.
- Don't project the beam onto combustible substances, as this causes a safety hazard.
- Please be aware that damages caused by manual modifications will void warranty.
- Keep away from children and non-professionals.
- Maintenance
- There are no serviceable parts inside the device except for the lamp. The following points have to be considered when inspecting the fixture for maintenance:
- All screws for installing the devices or parts of the device have to be tightly connected and must not be corroded.
- Mechanically moved parts must not show any traces of wearing and must not rotate with unbalances.
- The electric power supply cables must not show any damage, material fatigue or dirt.

General Guidelines

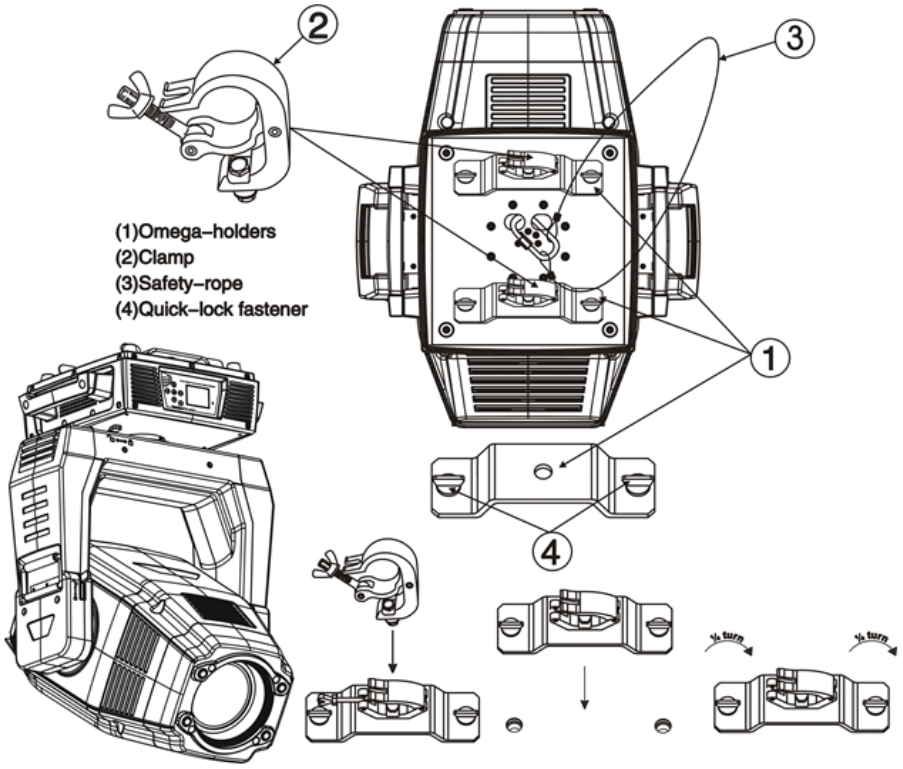
- This device is a lighting effect for professional use on stages, theaters, or other professional installations, etc., the device was designed for indoor use only.
- This fixture is only allowed to be operated with the max alternating current which stated in the technical specifications printed on the fixture.
- Lighting effects are not designed for permanent operation. Consistent operation breaks may ensure that the device will serve you for a long time without defects.
- Do not shake the device.Avoid brute force when installing or operating the device.
- While choosing the installation-spot, please make sure that the device is not exposed to extreme heat, moisture or dust. Please don't project the beam onto combustible substances.The minimum distance between light-output from the projector and the illuminated surface must be more than 0.1 meter.
- If you use the quick lock cam in hanging up the fixture, please make sure the quick lock fasteners turned in the quick lock holes correctly.
- Operate the device only after having familiarized with its functions. Do not permit operation by persons not qualified for operating the device. Most damages are the result of unprofessional operation.
- Please use the original packaging if the device is to be transported.
- For safety reasons, please be aware that all modifications on the device are forbidden.
- If this device will be operated in any way different to the one described in this manual, the product may suffer damages and the guarantee becomes void. Furthermore, any other operation may lead to short-circuit, burns, electric shock, lamp explosion, crash, etc.

Installation Instructions

- **The installation must always be secured with a secondary safety attachment, e.g. an appropriate safety cable.**
- **Never stand directly below the device when mounting, removing or servicing the fixture.**
- **The operator has to make sure the safety and technical installations are approved by an expert before taking using this fixture in the field for the first time.**
- **These installations must be inspected by a skilled person once a year.**
- **Overhead mounting requires extensive experience, including amongst others calculating working load limits, installation material being used, and periodic safety inspection of all installation material and the device. If you lack these qualifications, do not attempt the installation yourself. Improper installation can result in serious bodily injury.**

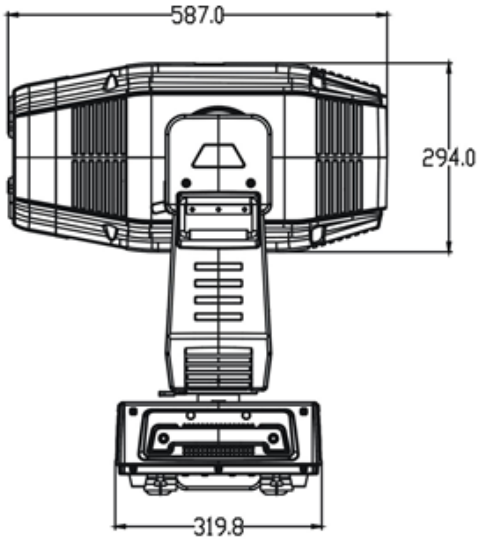
Attachment Instructions.

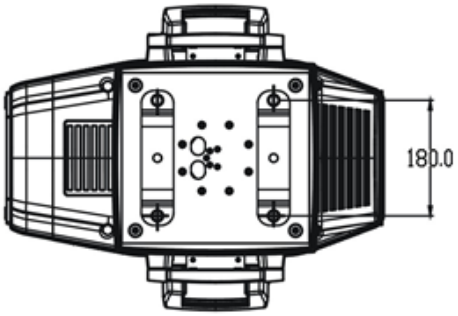
- Attach the Omega clamp on the bracket by tighten the M12 bolt on the bracket to the hole in the middle of the bracket.
- Insert the quick-lock fasteners of the bracket into the respective holes on the bottom of the fixture.
- Tighten the quick-lock fasteners fully clockwise.
- Install the second Omega clamp.
- Attach the safety-cable through the holes on the bottom of the base. Attach to the trussing system or other safe fixation point.
- Be sure the safety is fully looped, the quick-link is attached and fully tighten
- Inspect for complete attachment before lifting over-head

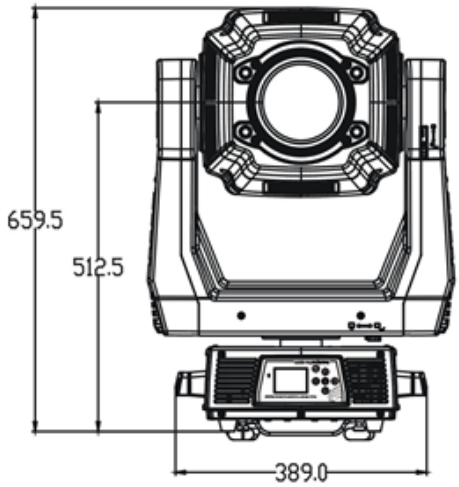


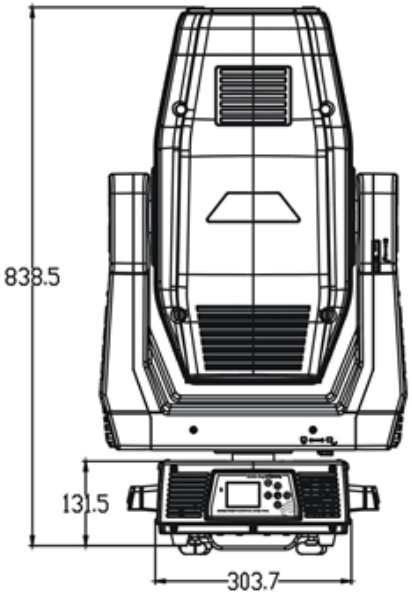
Dimensional Drawings

Dims listed in (MM)





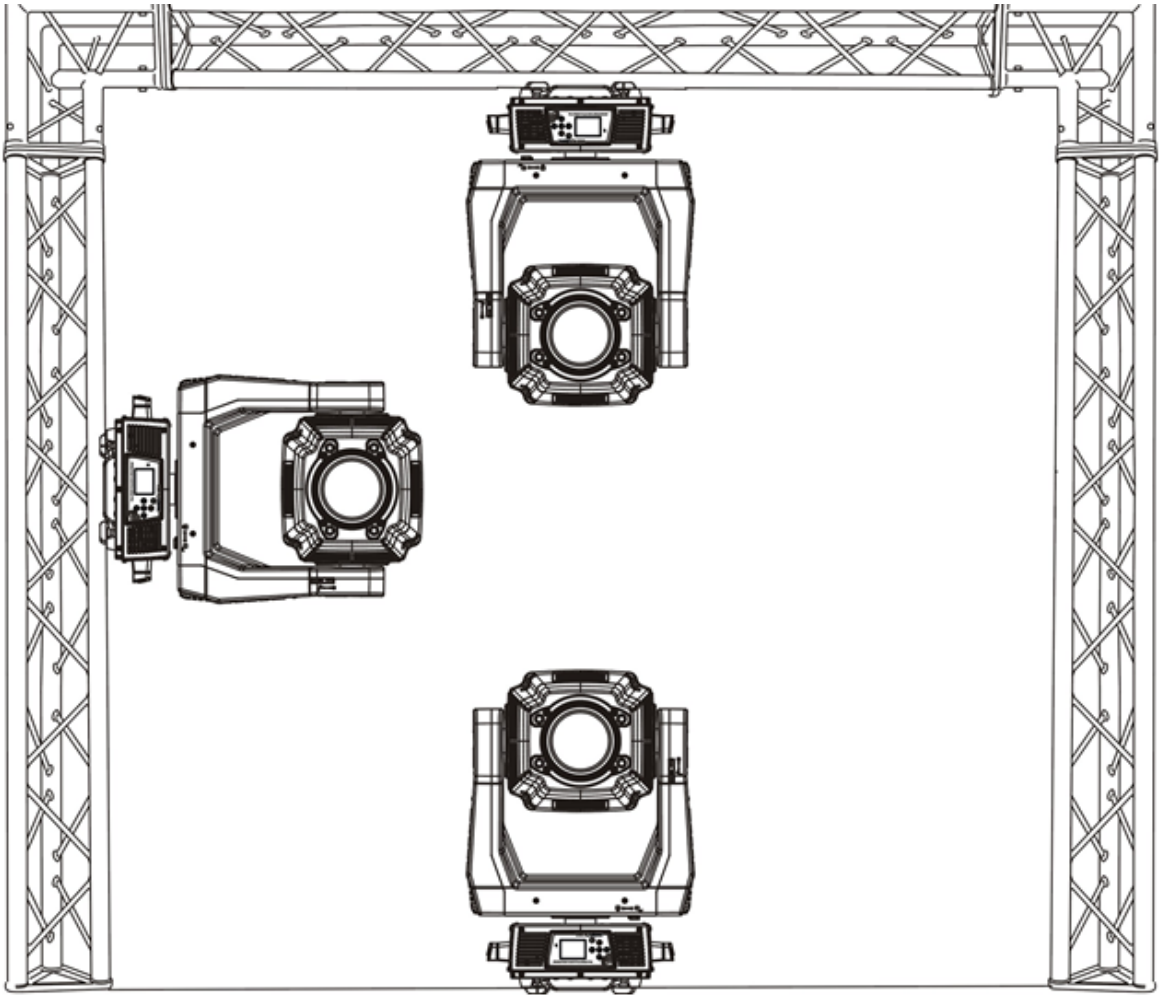




Mounting Orientations

Be sure this fixture is kept at least 0.5m (1.6ft) away from any flammable materials (decoration etc.). Always use and install the supplied safety cable as a safety measure to prevent accidental damage and/or injury in the event the clamp is improperly installed or fails.

Overhead mounting requires extensive experience, including amongst others calculating working load limits, a fine knowledge of the installation material being used, and periodic safety inspection of all installation material and the fixture. If you lack these qualifications, do not attempt the installation yourself. Improper installation can result in bodily injury.



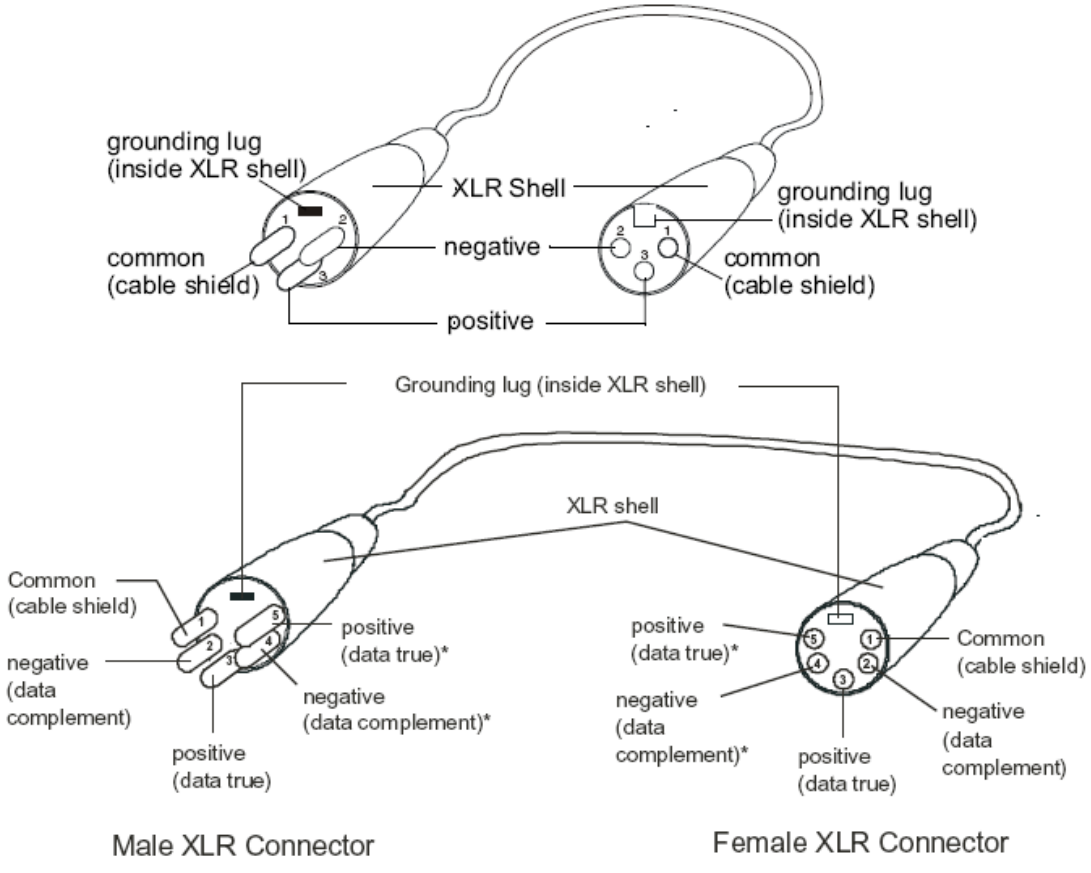
Linking Fixtures

The SolaSpot Pro 1500 fixture operates on standard DMX512 link controlled by a DMX console. The number of fixtures on a link will be determined by the combined number of channels required by all the fixtures. A SolaSpot Pro CMY fixture requires a 48 channel footprint on a standard DMX512 link. Attach the fixture to the link using data-grade cable and 5-pin or 3-pin XLR cable connectors

Cable Connectors

The SolaSpot Pro CMY fixture accepts both 3-pin and 5-pin XLR cable connectors. Cabling must have a male XLR connector on one end of the cable and a female XLR connector on the other end.

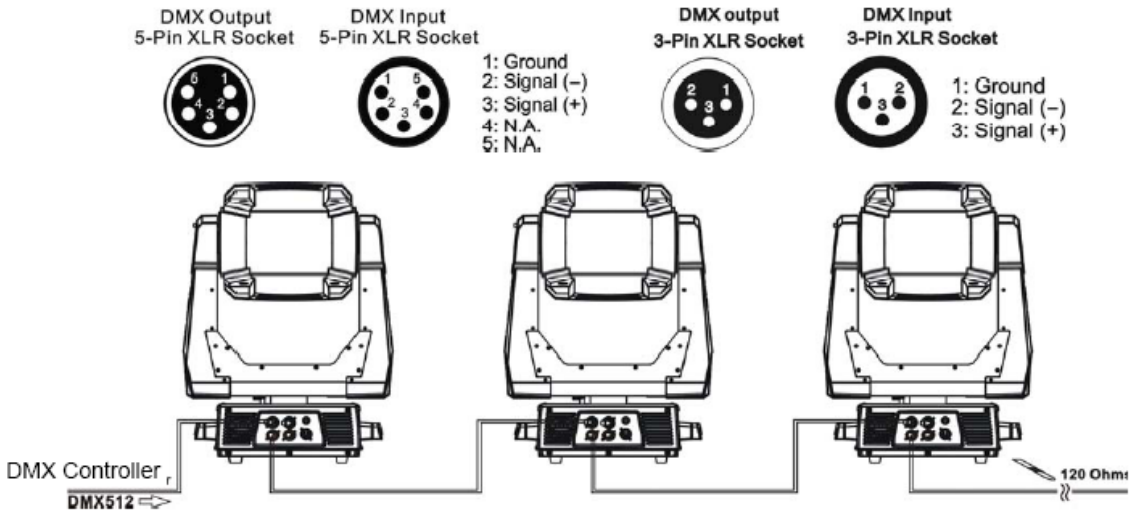
Note: Pins four and five of a 5-pin cable connector are not used, but they allow a secondary data link to pass through the fixture.



**This data line is not used by the fixture, but allows data to pass through the fixture.*

Connecting to the Link

To link one or more fixtures to a DMX controller:



- **Connect the male XLR connector of a DMX Data cable to the controller's DMX Data Out connector.**
- **Connect the Data cable's female XLR connector to the Data In connector of the first (or next) fixture on the DMX link.**
- **Continue linking the remaining fixtures connecting a cable from the Data Out connector of each fixture to the Data In connector of the next fixture on the link.**

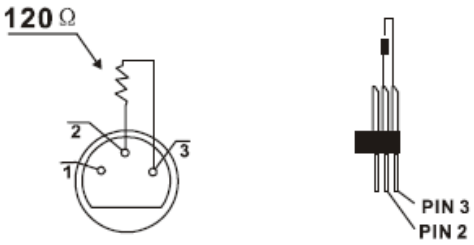
DMX Terminatation

For installations where the DMX cable has to run a long distance or is in an electrically noisy environment, a DMX terminator on the last fixture of the link prevents data reflection, which cancorrupt the data communication on the link.

Terminate the link by installing a 120 ohm, 1/4 watt (minimum) terminator in the fixture's Data Out (female) cable connector in the last fixture on each DMX link.

To construct a terminator:

1. Disassemble a male 3-pin or 5-pin XLR connector.
2. Solder a 120 ohm resistor, minimum of 1/4 watt, between Pin 2 and Pin 3.
3. Reassemble the XLR connector.



DMX Start Address

All fixtures should be given a unique DMX starting address when using a DMX signal, so that the correct fixture responds to the correct control signals. This DMX start address is the channel number from which the fixture starts to “listen” to the digital control information sent out from the DMX controller. The setting of this start address is achieved by setting the correct number on the display located on the base of the device.

You can set the same starting address for all fixtures or a group of fixtures, or make use different addresses for each fixture individually.

If you set the same address, all the units will start to “listen” to the same control signal from the same channel number. In other words, changing the settings of one channel will affect all the fixtures simultaneously.

If you set a different address, each unit will start to “listen” to the channel number you have set, based on the quantity of control channels of the unit. That means changing the settings of one channel will affect only the selected fixture.

In the case of the moving head, which is a 48 channel fixture, you should set the starting address of the first unit to 1, the second unit to 49 (48+ 1), the third to 97(48+ 49), and so on.

Fixture Control Board

The Control Board offers several features: you can simply set the starting address , run the pre-programmed program or make a reset.

The main menu is accessed by pressing the **[Mode / ESC]** button until the display starts flashing. Browse through the menu by pressing the **[UP]** button ,**[Down]** button , **[Left]** button or **[Right]** button. Press the **[Enter]** button in order to select the desired menu.

You can change the selection by pressing the directional buttons. ie. the **[UP]** button ,**[Down]** button , **[Left]** button or **[Right]**

Confirm every selection by pressing the **[Enter]**.

You can leave every mode or access the display menu via the internal battery by pressing the **[Mode / Esc]**button for 15 sec;

The functions provided are described in the following sections. it will exit from flash 10 seconds after the last keypress. Press this key under edit mode, . The functions provided are described in the following sections.

Address	A001~AXXX			DMX address setting
Info	Time Info.	Current Time	XXXX(Hours)	Power on running time
		Ttl Life Hrs	XXXX(Hours)	Fixture running time
		Last Run Hrs	XXXX(Hours)	Clear Fixture Last time
		Timer PIN	Password=XXX	Lamp Password Code=”038”
		Clr Last Run	ON/OFF	Clear lamp time
	Value Disp.	NONE ALL,PAN……		DMX Control DMX value display
	Head Temp.	XXX□/℉		Temperature in the head
	Software Ver	Ver1.0.0……		Software version of IC
Set	Status	No DMX Mode	Close/Hold/Auto/Music	Auto run if no DMX
		Pan Reverse	ON/OFF	Pan Reverse movement
		Tilt Reverse	ON/OFF	Tilt Reverse movement
		Pan Degree	630/540	Pan Degree Select
		Encoders	ON/OFF	Movement Feedback switch
		Pan/Tilt Spd	Speed 1~ 4	Movement Mode Select
		Mic Sens.	0~99%	Sensitivity of Mic.
		Hibernation	OFF, 01M~99M，15M	Stand by Mode
	Service PIN	Service PIN	Password=XXX	Service Code“=050”
		RDM PID	xxxxxx	RDM PID Code
	Disp.Setting	Shutoff Time	02~60m 02m	Display shutoff time
		Flip Display	ON/OFF	Display Reverse 180 degree
		Key Lock	ON/OFF	Key Lock
	Temp. C/F	Celsius Fahrenheit		Temperature switch between ℃/℉
	ResetDefault	ON/OFF		Restore factory set.

Test	Home	All Pan&Tilt Colors Gobos Others		Reset all motors Reset Pan/Tilt Reset color wheel Reset shutter and/or dimmer Reset other motors
	Test Channel	PAN ……		Test function
	Manual Ctrl.	PAN =XXX :		Fine adjustment of the lamp
	Calibration	-Password- Color wheel=XXX :		Password "050" Calbrate and adjust the effects to standard/right position
Preset	PlayBack	DMX Control Set To Slave Auto Program Music Ctrl.	 Slave1,Slave2,Slave3 Master / Alone Master / Alone	DMX Control Slave setting Auto program Music control
	Select Prog.	Prog. Part 1 = Program 1 ~ 10 Program 1 Prog. Part 2 = Program 1 ~ 10 Program 2 Prog. Part 3 = Program 1 ~ 10 Program 3		Select programs to be run
	Edit Prog.	Program 1 : Program 10	Program Test Step 01=SCxxx Step 64=SCxxx	Testing program Program in loop Save and exit
	Edit Scenes	Edit Scene 001 ~ Edit Scene 250	Pan,Tilt,…… --Fade Time-- --Secne Time-- Input By Outside	Save and automatically return manual scenes edit
	Scenes Input	XX~XX		Automat. scenes rec
Battery	Exit Battery			Exit Battery

Default settings shaded

Control Board Functions

Address

With this function, you can adjust the desired DMX-address via the Control Board.

1．Access the main menu.

2．Tap the <Up/Down>button until"Address"is displayed.

3．Press ENTER, the display will show "Address".

4．Tap the <Up/Down>button，the display will show "A001~AXXX"

5．Press ENTER to confirm or press <MODE/ESC> to return to the main menu

Time Info

Current Time

With this function, you can display the temporary running time of the device from the last power on. The display shows "XXXX", "XXXX" stands for the number of hours. The counter is resetted after turning the device off.

1．Tap <MODE/ESC>button，access the main menu，Tap the <Up/Down>button until"Info"is displayed. Press ENTER, the display will show "Info.". Tap the <Up/Down>button until the display will show "Time Info.". Press ENTER, the display will show "Time Info.".

2．Press <Up/Down>, the display will show "Current Time".

3．Press< ENTER>, the display will show "Current Time".

4．The display will show "XXXX" (Hours)；

5．Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

Ttl Life Hrs

With this function, you can display the running time of the device. The display shows "XXXX", "XXXX" stands for the number of hours.

1．Tap <MODE/ESC>button，access the main menu，Tap the <Up/Down>button until"Info"is displayed. Press ENTER, the display will show "Info.". Tap the <Up/Down>button until the display will show "Time Info.". Press ENTER, the display will show "Time Info.".

2．Press <Up/Down>, the display will show "Ttl Life Hrs".

3．Press< ENTER>, the display will show "Ttl Life Hrs".

4．The display will show "XXXX" (Hours)；

5．Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

Last Run Hrs

With this function, you can display last the running time of the lamp. The display shows "XXXX", "XXXX" stands for the number of hours.

1．Tap <MODE/ESC>button，access the main menu，Tap the <Up/Down>button until"Info"is displayed. Press ENTER, the display will show "Info". Tap the <Up/Down>button until the display will show "Time Info.". Press ENTER, the display will show "Time Info.".

2．Press <Up/Down>, the display will show "Last Run Hrs".

3．Press< ENTER>, the display will show "Last Run Hrs".

4．The display will show "XXXX" (Hours)；

5．Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

Timer PIN

With this function, you can display the timer password. The time password is 038.

1．Tap <MODE/ESC>button，access the main menu，Tap the <Up/Down>button until“Info”is displayed. Press ENTER, the display will show “Info”. Tap the <Up/Down>button until the display will show “Time Info.”. Press ENTER, the display will show “Time Info.”.

2．Press <Up/Down>, the display will show “Timer PIN”.

3．Press< ENTER>, the display will show “Timer PIN”, the time password is 038.

4．Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

Clr Last Run

With this function, you can clear last run time of the fixture. The display shows “OFF” or “ON”, Press “Enter” to confirm.

1．Tap <MODE/ESC>button，access the main menu，Tap the <Up/Down>button until“Info”is displayed. Press ENTER, the display will show “Info”. Tap the <Up/Down>button until the display will show “Time Info.”. Press ENTER, the display will show “Time Info.”.

2．Press <Up/Down>, the display will show “Clr Last Run”.

3．At“Timer Password”menu input a correct password, press< ENTER>, the display will show “Clr Last Run”,

4．The display will show “OFF”or“ON”.

5．Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

Value Displayed

NONE

With this function, you can choose DMX Control.

1．Tap <MODE/ESC>button，access the main menu，Tap the <Up/Down>button until“Info”is displayed. Press ENTER, the display will show “Info”.

2．Press <Up/Down>, the display will show “Value Disp”.

3．Press< ENTER>, the display will show “Value Disp”.

4．The display show “None”.

5．Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

ALL, PAN

With this function you can display the DMX 512 value of each channel. The display automatically shows the channel with a value changing.

1．Tap <MODE/ESC>button，access the main menu，Tap the <Up/Down>button until“Info”is displayed. Press ENTER, the display will show “Info”.

2．Tap the <Up/Down>button until“Value Disp”is displayed.

3．Press ENTER, the display will show “Value Disp”.

4．Tap the <Up/Down>button，choose each channel.

5．Press ENTER to confirm or press <MODE/ESC> to return to the main menu.

Head Temp.

With this function you can display the temperature on the display board of the base (near CMY-filter) in Celsius.

1．Tap <MODE/ESC>button，access the main menu，Tap the <Up/Down>button until“Info”is displayed. Press ENTER, the display will show “Info”.

2．Press <Up/Down>, the display will show “Head Temp.”.

3．Press< ENTER>, the display will show “Head Temp.”.

4．The display show “XXX °C/ °F”.

5．Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

Software Ver

With this function, you can display the software version of the device.

1．Tap <MODE/ESC>button，access the main menu，Tap the <Up/Down>button until“Info”is displayed. Press ENTER, the display will show “Info”.

2．Press <Up/Down>, the display will show “Software Ver”.

3．Press< ENTER>, the display will show “Software Ver”.

4．The display show “Ver x.x”.

5．Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

Set

Status

No DMX Mode

With this function, when the drive is not DMX signal, it runs automatism, close, hold and music, the default is hold.

1．Tap <MODE/ESC>button，access the main menu，Tap the <Up/Down>button until“Set”is displayed. Press ENTER, the display will show“Set”. Tap the <Up/Down>button until the display will show “Status”. Press ENTER, the display will show “Status”.

2．Press <Up/Down>, the display will show “No DMX Mode”.

3．Press< ENTER>, the display will show “No DMX Mode”.

4．The display show “Hold”,Press <Up/Down>, the display will show “Close”, “Auto”, “Music”.

5．Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

Pan Reverse

With this function you can reverse the Pan-movement.

1．Tap <MODE/ESC>button，access the main menu，Tap the <Up/Down>button until“Set”is displayed. Press ENTER, the display will show“Set”. Tap the <Up/Down>button until the display will show “Status”. Press ENTER, the display will show “Status”.

2．Press <Up/Down>, the display will show “Pan Reverse”.

3．Press< ENTER>, the display will show “Pan Reverse”.

4．The display show “OFF”,Press <Up/Down>, the display will show “ON”.

5．Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

Tilt Reverse

With this function you can reverse the Tilt-movement.

1．Tap <MODE/ESC>button，access the main menu，Tap the <Up/Down>button until“Set”is displayed. Press ENTER, the display will show“Set”. Tap the <Up/Down>button until the display will show “Status”. Press ENTER, the display will show “Status”.

2．Press <Up/Down>, the display will show “Tilt Reverse”.

3．Press< ENTER>, the display will show “Tilt Reverse”.

4．The display show “OFF”,Press <Up/Down>, the display will show “ON”.

5．Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

Pan Degree

With this function, you can select pan degree for 630 or 540.

1．Tap <MODE/ESC>button，access the main menu，Tap the <Up/Down>button until“Set”is displayed. Press ENTER, the display will show“Set”. Tap the <Up/Down>button until the display will show “Status”. Press ENTER, the display will show “Status”.

2．Press <Up/Down>, the display will show “Pan Degree”.

3．Press< ENTER>, the display will show “Pan Degree”.

4．The display show “540”,Press <Up/Down>, the display will show “630”.

5．Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

Encoders

With this function, you can feedback switch of pan movement or tilt movement.

1．Tap <MODE/ESC>button，access the main menu，Tap the <Up/Down>button until“Set”is displayed. Press ENTER, the display will show“Set”. Tap the <Up/Down>button until the display will show “Status”. Press ENTER, the display will show “Status”.

2．Press <Up/Down>, the display will show “Encoders”.

3．Press< ENTER>, the display will show “Encoders”.

4．The display show “ON”,Press <Up/Down>, the display will show “OFF”.

5．Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

Pan/Tilt Spd

With this function, you can select scan mode from 1 to 4.

1．Tap <MODE/ESC>button，access the main menu，Tap the <Up/Down>button until“Set”is displayed. Press ENTER, the display will show“Set”. Tap the <Up/Down>button until the display will show “Status”. Press ENTER, the display will show “Status”.

2．Press <Up/Down>, the display will show “Pan/Tilt Spd”.

3．Press< ENTER>, the display will show “Pan/Tilt Spd”.

4．The display show “Speed 1”,Press <Up/Down>, the display will show “Speed 2”, “Speed 3”, “Speed 4”.

5．Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

Mic Sens.

With this function, the default is 70%, you can select the desired microphone sensitivity from 0 % to 99 %.

1．Tap <MODE/ESC>button，access the main menu，Tap the <Up/Down>button until“Set”is displayed. Press ENTER, the display will show“Set”. Tap the <Up/Down>button until the display will show “Status”. Press ENTER, the display will show “Status”.

2．Press <Up/Down>, the display will show “Mic Sens.”.

3．Press< ENTER>, the display will show “Mic Sens.”.

4．The display show “70%”,Press <Up/Down>, the display will show “0~99%”.

5．Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

Hibernation ——Standby mode

The lamp and step motors will be power off if the fixture stay without DMX signal for 15 mins (Factory default).And the fixture will be reset before working once it receive DMX signal again.

1．Tap <MODE/ESC>button，access the main menu，Tap the <Up/Down>button until“Set”is displayed. Press ENTER, the display will show“Set”. Tap the <Up/Down>button until the display will show “Status”. Press ENTER, the display will show “Status”.

2．Press <Up/Down>, the display will show “Hibernation”.

3．Press< ENTER>, the display will show “Hibernation”.

4．The display show “15M”,Press <Up/Down>, the display will show “01M”，“02M” …. “99M” or“OFF”.

5．Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

Service PIN

Service PIN——The Password for this function is “50”.

RDM PID—— With this function you can call up various submenus via RDM.

This device is RDM ready. RDM stands for "remote device management" and makes remote control of devices connected to the DMX-bus. ANSI E1.20-2006 by ESTA specifies the RDM standard as an extension of the DMX512 protocol.

Manual settings like adjusting the DMX starting address are no longer needed. This is especially useful when the device is installed in a remote area.

RDM ready and conventional DMX devices can be operated in one DMX line. The RDM protocol sends own packages in the DMX512 data feed and does not influence conventional devices.

If DMX splitters are used and RDM control is to be used, these splitters must support RDM.

The number and type of RDM parameters depend on the RDM controller being used.

Disp.Setting

Shutoff Time

With this function you can shut off the color LCD display after 2 to 60 minutes. Turn the encoder in order to select the desired shut off time. The default is 2 minute.

Flip Display

With this function you can rotate the display by 180°.

1．Tap <MODE/ESC>button，access the main menu，Tap the <Up/Down>button until“Set”is displayed. Press ENTER, the display will show “Set”. Tap the <Up/Down>button until the display will show “Disp.Setting”. Press ENTER, the display will show “Disp.Setting”.

2．Press <Up/Down>, the display will show “Flip Display”.

3．Press< ENTER>, the display will show “Flip Display”.

4．The display show “OFF”,Press <Up/Down>, the display will show “ON”.

5．Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

Key Lock

With this function you can activate the automatic keylock status. If this function is activated, the keys will be locked automatically after exiting the edit mode for 15 seconds. keeping press the<MODE/ESC> key for 3seconds if you do not need this function.

1．Tap <MODE/ESC>button，access the main menu，Tap the <Up/Down>button until“Set”is displayed. Press ENTER, the display will show “Set”. Tap the <Up/Down>button until the display will show “Disp.Setting”. Press ENTER, the display will show “Disp.Setting”.

2．Press <Up/Down>, the display will show“Key Lock”.

3．Press< ENTER>, the display will show“Key Lock”.

4．The display show “ON”,Press <Up/Down>, the display will show “OFF”.

5．Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

Temp. C/F

With this function, Display the temperature for Celsius or Fahrenheit.

1．Tap <MODE/ESC>button，access the main menu，Tap the <Up/Down>button until“Set”is displayed. Press ENTER, the display will show “Set”.

2．Press <Up/Down>, the display will show“Temp. C/F”.

3．Press< ENTER>, the display will show“Temp. C/F”.

4．The display show “Celsius”,Press <Up/Down>, the display will show “Fahrenheit”.

5．Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

ResetDefault

With this function, you can select restore factory set for ON or OFF, the default is OFF.

1．Tap <MODE/ESC>button，access the main menu，Tap the <Up/Down>button until“Set”is displayed. Press ENTER, the display will show “Set”.

2．Press <Up/Down>, the display will show“ResetDefault”.

3．Press< ENTER>, the display will show“ResetDefault”.

4．The display show “OFF”,Press <Up/Down>, the display will show “ON”.

5．Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

Test

Home

With this function you can reset the device via the Control Board. You can select the different reset functions by turning the encoder.

1．Tap <MODE/ESC>button，access the main menu，Tap the <Up/Down>button until“Test”is displayed. Press ENTER, the display will show “Test”. Tap the <Up/Down>button until the display will show “Home”. Press ENTER, the display will show “Home”.

2．The display show “ All”, Press <Up/Down>, the display will show “Pan&Tilt”，“Colors”, “Shutter”, “Others”.

3．Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

Test Channel

With this function you can test each channel on its (correct) function.

1．Tap <MODE/ESC>button，access the main menu，Tap the <Up/Down>button until“Test”is displayed. Press ENTER, the display will show “Test”.

2．Press <Up/Down>, the display will show “Test Channel”.

3．Press< ENTER>, the display will show “Test Channel”.

4．The display show “Pan Moving”frist channel, Press <Up/Down>, can choose other channel.

5．Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

Manual Ctrl.

With this function, you can adjust the lamp more easily. All effects will be canceled, the shutter opens and the dimmer intensity will be set to 100 %. With the individual functions, you can focus the light on a flat surface (wall) and erform the fine lamp adjustment.

1．Tap <MODE/ESC>button，access the main menu，Tap the <Up/Down>button until“Test”is displayed. Press ENTER, the display will show “Test”.

2．Press <Up/Down>, the display will show “Manual Ctrl.”.

3．Press< ENTER>, the display will show “Manual Ctrl.”.

4．The display show “PAN=XXX”.

5．Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

Calibration

With this function, you can calibrate and adjust the effect wheels to their correct positions. The password of calibrate values is 050.

1．Tap <MODE/ESC>button，access the main menu，Tap the <Up/Down>button until“Test”is displayed. Press ENTER, the display will show “Test”.

2．Press <Up/Down>, the display will show “Calibration”.

3．Press< ENTER>, the display will show “Calibration”.

4．The display show “Password=XXXX”.

5．Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

Preset

In this menu, user can select different channels list by different sequence:

For example, after the user enter this manual, if select Auto Program = CH 22, means in this User’s mode, the “Dimmer” is in Channel 16.

PlayBack

DMX Control

With this function you can display the DMX 512 value of each channel. The display automatically shows the channel with a value changing.

1．Tap <MODE/ESC>button，access the main menu，Tap the <Up/Down>button until“Preset”is displayed. Press ENTER, the display will show “Preset”. Tap the <Up/Down>button until the display will show “PlayBack”. Press ENTER, the display will show “PlayBack”.

2．Tap the <Up/Down>button until“DMX Control”is displayed.

3．Press ENTER, the display will show “DMX Control”.

4．Tap the <Up/Down>button，choose each channel.

5．Press ENTER to confirm or press <MODE/ESC> to return to the main menu.

Set To Slave

With this function, you can define the device as slave.

1．Tap <MODE/ESC>button，access the main menu，Tap the <Up/Down>button until“Preset”is displayed. Press ENTER, the display will show “Preset”. Tap the <Up/Down>button until the display will show “PlayBack”. Press ENTER, the display will show “PlayBack”.

2．Tap the <Up/Down>button until“Set To Slave”is displayed.

3．Press ENTER, the display will show “Set To Slave”.

4．Tap the <Up/Down>button，the display will show “Slave1”, ”Slave2”, ”Slave3”.

5．Press ENTER to confirm or press <MODE/ESC> to return to the main menu.

Auto Program

With this function, you can run the internal program. You can select the desired program under “Select program”. You can set the number of steps under “Edit program”. You can edit the individual scenes under “Edit scenes”. With this function, you can run the individual scenes either automatically, i.e. with the adjusted Step-Time.

1．Tap <MODE/ESC>button，access the main menu，Tap the <Up/Down>button until“Preset”is displayed. Press ENTER, the display will show “Preset”. Tap the <Up/Down>button until the display will show “PlayBack”. Press ENTER, the display will show “PlayBack”.

2．Tap the <Up/Down>button until“Auto Program”is displayed.

3．Press ENTER, the display will show “Auto Program”.

4．Tap the <Up/Down>button，the display will show “Master1”, ” Alone”.

5．Press ENTER to confirm or press <MODE/ESC> to return to the main menu.

Music Ctrl.

With this function, you can run the internal program sound-controlled.

1．Tap <MODE/ESC>button，access the main menu，Tap the <Up/Down>button until“Preset”is displayed. Press ENTER, the display will show “Preset”. Tap the <Up/Down>button until the display will show “PlayBack”. Press ENTER, the display will show “PlayBack”.

2．Tap the <Up/Down>button until“Music Ctrl.”is displayed.

3．Press <ENTER>, the display will show “Music Ctrl.”.

4．Tap the <Up/Down>button，the display will show “Master”, ” Alone”.

5．Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

Select Prog.

With this function, you can select the program for the Program Run.

Edit Prog.

With this function, you can edit the internal programs.

Edit Scenes

With this function, you can edit the scenes of the internal programs.

Scenes Input

The moving head features an integrated DMX-recorder by which you can transmit the programmed scenes from your DMX-controller to the moving head. Adjust the desired scene numbers via the encoder (from – to). When you call up the scenes at your controller, they will automatically be transmitted to the moving head.

Battery

With this function, you can exit battery.

Preset Programming and Playback

SolaSpot Pro 1500 fixtures can be programmed through the on board menu system using Preset Programming. This section describes how to program your fixtures for stand-alone operation using the on-board memory in each fixture to create and store scenes.

Preset Programming Overview

Presets are built from combining scenes into programs and then assigning the programs to Program Partitions for playback by a fixture designated as the Master and, if desired, groups of slave fixtures assigned to a Program Partition. SolaSpot Pro CMY fixtures ship with factory programmed scenes and programs ready for you to use or edit.

Creating presets consists of performing the following steps:

- Designating a fixture as the Master
- Selecting/Editing Scenes
- Sequencing Scenes into Programs
- Sequencing Programs into Program Partitions
- Configuring slave fixtures on the link to playback a Program Partition from the master

Navigating to the Preset Menu

To enter the Preset Menu:

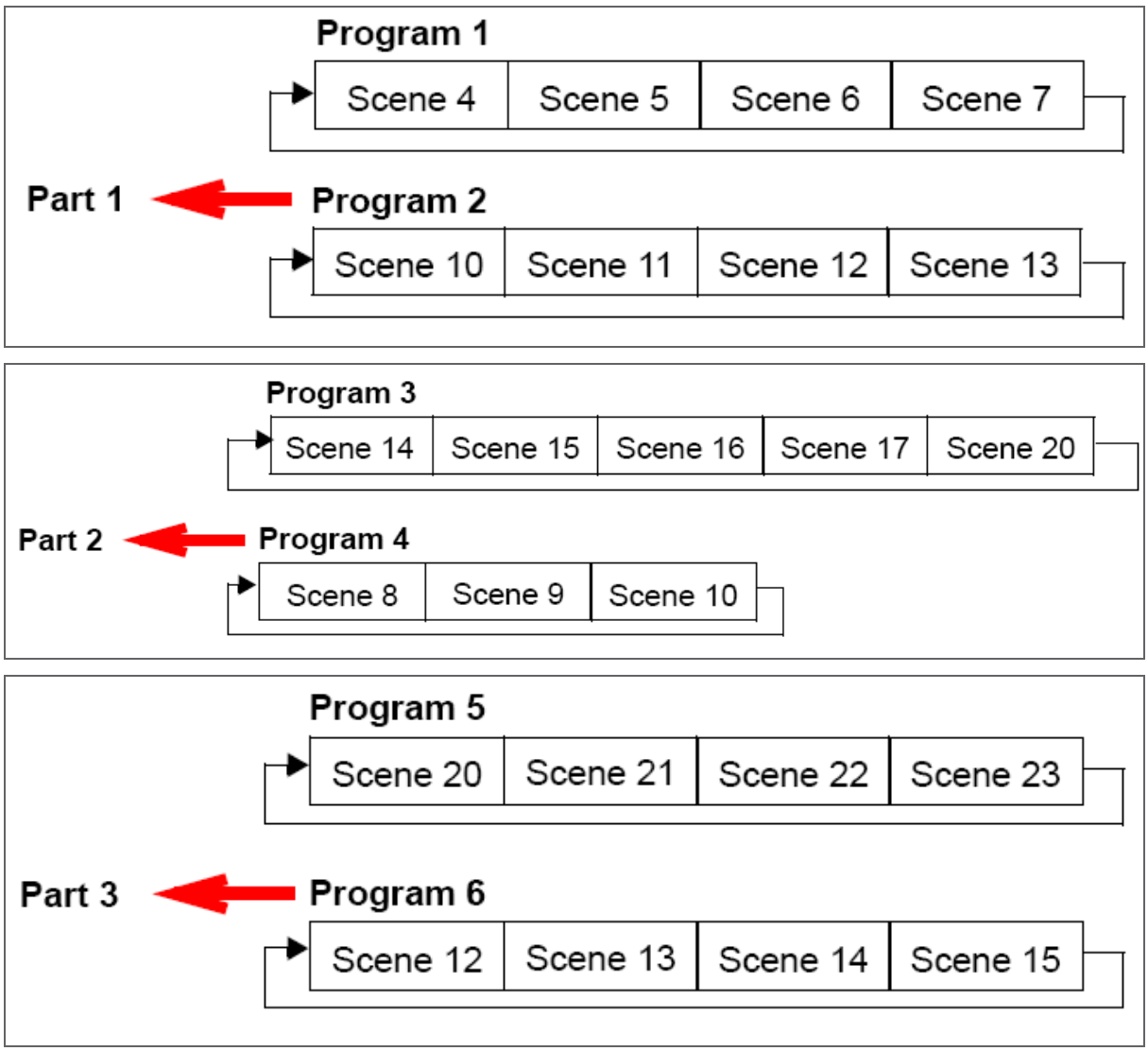
- Press the **[MODE/ESC]** button to enter the first level of the menu system. The display will show Address and Info as the first two options in the top menu level.
- *The red star **[*]** indicates the current menu.*
- Using the **[UP],[DOWN]** buttons, scroll to **Preset.**
- Press the **[Enter]** button to select.

Master and Slave

The following example shows the relationship between scenes, programs and partitions

programmed on the Master and how slave groups are assigned.

- Groups of scenes are edited into Programs 1– 6 on the fixture designated as Master
- Program 2 is assigned to Part 1
- Program 4 is assigned to Part 2
- Program 6 is assigned to Part 3
- Fixtures assigned as Slave 1 playback Part 1
- Fixtures assigned as Slave 2 playback Part 2
- Fixtures assigned as Slave 3 playback Part 3
- Scene 4 Scene 5 Scene 6 Scene 7



Preset Menu

Playback Settings

Preset programming requires one fixture to act as the Master. All other SolaSpot Pro 1500 fixtures on the link can then be set as laves to playback the Master presets. Slave fixtures receive all their preset parameter and timing information from the master fixture. Playback settings designate a fixture as a master or a slave and also allow you to revert from Auto Programming to DMX control from console or set a fixture in Master or standalone mode for audio control.

Automatic Program Run

This Playback option lets you designate a fixture to playback in Standalone mode or as a Master. **Alone** is the default setting.

To designate a fixture as a Master:

- Navigate to and select the Preset menu.
- Use the**[UP]**,**[DOWN]** buttons to scroll to Playback menu and press **[Enter]**to select.

- Use the**[UP],[DOWN]** buttons to scroll to Auto Program menu and press **[Enter]**to select.
- Use the **[UP],[DOWN]**buttons to scroll to Master and press **[Enter]**to select. Your choice will be shown in the display.

Set to Slave

After a preset program is defined on a Master fixture, other SolaSpot Pro CMY fixtures on the same DMX link can be designated laves to playback Program Part 1, 2 or 3 as defined on the Master fixture.

To designate a fixture as a Slave:

- Navigate to and select the Preset menu.
- Use the **[UP],[DOWN]**buttons to scroll to **Playback** menu and press **[Enter]**to select.
- Use the **[UP],[DOWN]**buttons to scroll to **Set To Slave** menu and press **[Enter]**to select.
- Use the **[UP],[DOWN]**buttons to scroll to **Slave1, Slave2, or Slave3** option and press **[Enter]**to select.
- Your choice will be shown in the display.

DMX Control

Selecting this option reverts the function from **Auto Program** (Preset Programming) to **DMX Receive** (console control). Selecting this option will take you back to the menu startup screen where **DMX Receive** will be displayed as the currently selected function.

Music Control

This Playback option lets you designate a fixture to playback scenes based on audio triggers detected by the internal microphone in stand alone or as a Master. **Alone** is the default setting.

Edit Scenes

A parameter is a fixture attribute that can be controlled to modify the light beam in terms of color, beam quality and pattern, intensity, or focus (position). DMX programming assigns a DMX value to each of the fixture's parameters. A scene is one combination of parameter settings.

SolaSpot Pro 1500 fixtures provide 250 pre-programmed scenes you can use or edit to build a preset program. The first 64 scenes ave factory created settings which can be edited as desired.

Edit Scene Parameters

The **Edit Scenes** option lets you select a DMX value for any of the 35 parameters in the SolaSpot Pro 1500 DMX protocol.

To edit the DMX parameters in a scene:

- Navigate to and select the **Preset** menu as shown on page 35.
- Use the **[UP],[DOWN]**buttons to scroll to the Edit Scenes option and press **[Enter]**to select.
- Use the **[UP],[DOWN]**buttons to scroll to the Scene number you wish to build on from 1-250 and press to **[Enter]**select.
- Use the **[UP],[DOWN]**buttons to scroll to the parameter you wish to edit (Pan, Tilt, MSpeed, Color Wheel, etc.) and press to **[Enter]**select.

Use the **[UP],[DOWN]**buttons to scroll to a new DMX value for the parameter you have selected and press**[Enter]** to select. This takes you back to parameter options. Continue through all parameters until your desired look is complete.

- When you are finished selecting all parameter values for a particular Scene, press the **[MODE/ESC]**button to return to the Preset level menu.

Edit Scene Time

This Scene Edit option lets you set the scene time in seconds from 00.2s–99.9s. The default value is 00.3s. This values determines how long the scene will play before the next scene is triggered.

Set Fade Time

This Scene Edit option lets you set a fade time value from 000–255. This values determines the crossfade time applied to parameters once the scene is triggered.

Set Input by Out

This Scene Edit option allows you to capture the parameter values for a scene from DMX input into the fixture. Once you create a look from a DMX console do the following:

- Navigate to and select the Preset menu as shown on page 35.
- Use the **[UP],[DOWN]**buttons to scroll to the Edit Scenes option and press **[Enter]**to select.
- Use the **[UP],[DOWN]**buttons to scroll to the Scene number you wish to build on from 1-250 and press to **[Enter]**select.
- Use the **[UP],[DOWN]**button to scroll to the Input by Out and **[Enter]**press to select.
- The scene will record the current parameter values being input via DMX.
- When you are finished capturing DMX into a scene, press **[Enter]**to return to the main menu.

Edit Program

This preset menu option lets you select from 10 factory set programs to edit. You can set up to 64 Scenes in a sequence of Steps for each program. You can also test the program at any time by selecting Program Test to playback the program as it is currently defined.

To edit a program:

- Navigate to and select the Preset menu.
- Use the **[UP],[DOWN]** buttons to scroll to Edit Prog. menu and press **[Enter]**to select.
- Use the **[UP],[DOWN]** buttons to scroll to a program from Program 1–Program 10 and press **[Enter]**to select.
- Use the **[UP],[DOWN]**buttons to scroll to the Step in the program you want to edit from Step 1 to Step 64 and press **[Enter]** to select. The display will show which scene is currently assigned to that step.
- Use the **[UP],[DOWN]**buttons to scroll to the scroll to the scene you want to assign to the step and press **[Enter]**to select.
- When you have assigned all the steps you want, select End and press **[Enter]**to save the program.

Select Program

This preset option lets you assign a Preset Program to one of three Program Partitions. A fixture assigned as a Slave can playback any Program Partition defined by the Master fixture.

Note: The Master fixture can only playback Program Partition 1

To assign a program to each Program Partition:

- Navigate to and select the Preset menu as shown on page 35.
- Use the **[UP],[DOWN]**buttons to scroll to **Select Prog** menu and press **[Enter]**to select. Each Program Part, has 10 preset programs.
- Use the **[UP],[DOWN]**buttons to scroll to **Prog. Part 1** and press **[Enter]**to select.
- Use the **[UP],[DOWN]**buttons to scroll to a program from **Program 1–Program 10** and press **[Enter]**to select the program you want to include in the Program Part.

- Use the **[UP],[DOWN]**buttons to scroll to **Prog. Part 2** and press **[Enter]**to select.
- Use the **[UP],[DOWN]**buttons to scroll to a program from **Program 1–Program 10** and press**[Enter]** to select the program you want to include in the Program Part.
- Use the **[UP],[DOWN]**buttons to scroll to **Prog. Part 3** and press **[Enter]**to select.
- Use the **[UP],[DOWN]**buttons to scroll to a program from **Program 1–Program 10** and press **[Enter]**to select the program you want to include in the Program Part.
- Press the **[Mode / ESC]** button to return to the main menu.

Scenes Input

This function allows you to capture multiple scenes from DMX values input to the fixture. You first

define the number of scenes to capture and then each time a DMX value changes, a different

scene will be captured.

1. Navigate to and select the Preset menu as shown on page 49.

2.Use the buttons to scroll to the Scenes Input option and press to select.

3.Use the buttons to set the starting scene number.

4.Use the buttons to set the ending scene number. With each change of any DMX value, the capturing scene will advance to the next one in the range.

5.When all scenes have been recorded, the scenes input menu will automatically exit.

Note: During Scenes Input recording, the SolaSpot Pro CMY does not playback the DMX input, it only captures it. You must edit or playback the scenes after recording to see the results. It is best to prepare the scenes on a DMX controller with a zero crossfade for all parameters between each step. Remember any change of a DMX value will advance to the next scene to capture.

DMX Protocol

Channel	Name	Description	Decimal Low	Decimal High	Percent Low	Percent High
1	Pan	Pan Coarse	0	255	0%	100%
2	Pan	Pan Fine	0	255	0%	100%
3	Tilt	Tilt Coarse	0	255	0%	100%
4	Tilt	Tilt Fine	0	255	0%	100%
		Pure Mix	0	31	0%	12%
	Color Mix	Cycle	32	47	13%	18%
5	Function	Random	48	63	19%	25%
		Reserved	64	255	25%	100%
		Pure Mix				
6	Cyan	Full Saturation	0		100%	
7	Magenta	Open	255		0%	
8	Yellow	Cycle & Random Modes. Scan Speed controlled by Cyan Channel				
		Slow Rate	0		0%	
		Fast Rate	255		100%	
9	CTO	Full Saturation	0		0%	
		Open (White)	255		100%	
		Full Speed Control				
		Indexed	0	15	0%	6%
		Forward Spin	16	31	6%	12%
10	Static Color	Reverse Spin	32	47	13%	18%
	Function	Continuous	48	63	19%	25%
		Fast Scan	64	79	25%	31%
		Random	80	95	31%	37%
		Reserved	96	255	38%	100%
		"Indexed, Scan modes"				
		1. Open (White)	0	16	0%	6%
		2. (Open/Color 1)	17	32	7%	13%
		3. (Color 1)	33	48	13%	19%
		4. (Color 1/Color 2)	49	64	19%	25%
		5. (Color 2)	65	80	25%	31%
		6. (Color 2/Color 3)	81	96	32%	38%
		7. (Color 3)	97	112	38%	44%
		8. (Color 3/Color 4)	113	128	44%	50%
11	Static Color	9. (Color 4)	129	144	51%	56%
	Position	10. (Color 4/Color 5)	145	160	57%	63%
		11. (Color 5)	161	176	63%	69%
		12. (Color 5/Color 6)	177	192	69%	75%
		13. (Color 6)	193	208	76%	82%
		14. (Color 6/Open)	209	224	82%	88%
		1. Open (White)	225	255	88%	100%
		Spin & Random modes				
		Stop	0		0%	0%
		Slowest to fastest	255		100%	0%

		Continuous mode				
		Positioning from 0-360 degrees	0	255	0%	100%
		Full Speed Control				
		Indexed	0	15	0%	6%
		Forward Wheel Spin	16	31	6%	12%
12	Gobo 1	Reverse Wheel Spin	32	47	13%	18%
	Function	Scan	48	63	19%	25%
		Random	64	79	25%	31%
		TBD/Indexed	80	255	31%	100%
		"Indexed, Scan & Blink modes"				
		1. (Open)	0	31	0%	12%
		2. (Rot. Gobo 1)	32	63	13%	25%
		3. (Rot. Gobo 2)	34	35	13%	14%
		4. (Rot. Gobo 3)	96	127	38%	50%
13	Gobo 1	5. (Rot. Gobo 4)	128	159	50%	62%
	Position	6. (Rot. Gobo 5)	160	191	63%	75%
		7. (Rot. Gobo 6)	192	223	75%	87%
		1. (Open)	224	255	88%	100%
		Spin & Random modes				
		Rotate Stop	0	3	0%	1%
		Slowest to fastest	4	255	2%	100%
		Full Speed Control				
		Indexed	0	15	0%	6%
	Gobo 1	Forward Rotate	16	31	6%	12%
14	Rotate	Reverse Rotate	32	47	13%	18%
	Function	Forward Strobe Rotate (Gobo animate)	48	63	19%	25%
		Reverse Strobe Rotate (Gobo animate)	64	79	25%	31%
		Reserved	80	255	31%	100%
		Indexed/Blink Modes				
	Gobo 1	Position 0-360 degrees	0	255	0%	100%
15	Rotate	Forward/Reverse/Forward Strobe/Reverse Strobe Rotate Modes				
	Coarse	Rotate Stop	0	3	0%	1%
		Rotate Slowest to Fastest	4	255	2%	100%
16	Gobo 1	Indexed Mode				
	Rotate Fine	Low Order Byte 0-360 degrees	0	255	0%	100%
		Full Speed Control				
		Indexed	0	15	0%	6%
		Forward Wheel Spin	16	31	6%	12%
17	Gobo 2	Reverse Wheel Spin	32	47	13%	18%
	Function	Scan	48	63	19%	25%
		Random	64	79	25%	31%
		TBD/Indexed	80	255	31%	100%
		1. (Open)	0	15	0%	6%
		2. (Gobo 1)	16	47	6%	18%
		3. (Gobo 2)	48	79	19%	31%
18	Gobo 2	4. (Gobo 3)	80	111	31%	44%
	Position	5. (Gobo 4)	112	143	44%	56%
		6. (Gobo 5)	144	175	56%	69%

		7. (Gobo 6)	176	207	69%	81%
		8. (Gobo 7)	208	239	82%	94%
		1. (Open)	240	255	94%	100%
19	Blade 1 Position	Full in (0) to Full out (255) or open	0	255	0%	100%
		Blade Angle Negative	0	127	0%	50%
20	Blade 1 Angle	Blade Angle 0 degrees	128		50%	
		Blade Angle positive	129	255	51%	100%
21	Blade 2 Position	Full in (0) to Full out (255) or open	0	255	0%	100%
		Blade Angle Negative	0	127	0%	50%
22	Blade 2 Angle	Blade Angle 0 degrees	128		50%	
		Blade Angle positive	129	255	51%	100%
23	Blade 3 Position	Full in (0) to Full out (255) or open	0	255	0%	100%
		Blade Angle Negative	0	127	0%	50%
24	Blade 3 Angle	Blade Angle 0 degrees	128		50%	
		Blade Angle positive	129	255	51%	100%
25	Blade 4 Position	Full in (0) to Full out (255) or open	0	255	0%	100%
		Blade Angle Negative	0	127	0%	50%
26	Blade 4 Angle	Blade Angle 0 degrees	128		50%	
		Blade Angle positive	129	255	51%	100%
		Frame Angle Negative	0	127	0%	50%
27	Frame Rotation	Frame Angle 0 degrees	128		50%	
	Coarse	Frame Angle positive	129	255	51%	100%
		Frame Angle Negative	0	127	0%	50%
28	Frame Rotation	Frame Angle 0 degrees	128		50%	
	Fine	Frame Angle positive	129	255	51%	100%
29	Animation	Close	0	7	0%	3%
	Function	Animation speed from fast to slow	8	255	3%	100%
		Full Speed Control				
		Disengaged	0	15	0%	6%
		Continuous	16	31	6%	12%
30	Prism	Forward Spin	32	47	13%	18%
	Function	Reverse Spin	48	63	19%	25%
		Forward Strobe Rotate (Effect animate)	64	79	25%	31%
		Reverse Strobe Rotate (Effect animate)	80	95	31%	37%
		Reserved	96	255	38%	100%
		Continuous mode				
	Prism	Position 0-360 degrees	0	255	0%	100%
31	Rotate	Forward/Reverse/Forward Strobe/Reverse Strobe Rotate Modes				
	Coarse	Rotate Stop	0	3	0%	1%
		Rotate Slowest to Fastest	4	255	2%	100%
32	Prism	Continuous mode				
	Rotate Fine	Low Order Byte 0-360 degrees	0	255	0%	100%
		Open (hard edge)	0		0%	0%
		Variable edge hard to soft)	1	127	0%	50%
33	Frost	Soft Edge	128	135	50%	53%
		Periodic strobe	136	151	53%	59%
		Random strobe	152	167	60%	65%
		Open (hard edge)	168	225	66%	88%

34	Focus Coarse	Focus In	0		0%	
		Focus Out	255		100%	
35	Focus Fine	Focus In	0		0%	
		Focus Out	255		100%	
36	Zoom Coarse	Zoom In	0		0%	
		Zoom Out	255		100%	
37	Zoom Fine	Zoom In	0		0%	
		Zoom Out	255		100%	
38	Auto Focus	Auto Focus Off	0	15	0%	6%
		5m	16	31	6%	12%
		7.5m	32	47	13%	18%
		10m	48	255	19%	100%
39	AutoFocus Fine	Focus In Fine	0		0%	
		Focus Out Fine	255		100%	
40	Iris	Iris Closed	0		0%	
		Iris Open	255		100%	
		Normal Shutter Functions	0	31	0%	12%
	Shutter/LED	Random Random strobe	32	63	13%	25%
41	Functions	Synchronous Random Strobe	64	95	25%	37%
		Normal Shutter Functions	96	255	38%	100%
		Normal/Random/Sync Random shutter functions.				
		Close	0	23	0%	9%
42	Shutter/LED	Strobe Rate (slow to fast)	24	229	9%	90%
		Open	230	255	90%	100%
43	Dim Coarse	Close	0		0%	
		Open	255		100%	
44	Dim Fine		0		0%	
			255		100%	
		Disable	0	3	0%	1%
45	Mspeed	Longest (252.7 seconds)	4		2%	
		Shortest (0.15 seconds)	255		100%	
		The Control channel should not be cross-faded. No shutter channel requirement.				
		Safe (normal operation)	0	9	0%	4%
		Pan & Tilt Mspeed Off	10	19	4%	7%
		Shutter channel to 0 for access to the following commands.				
		Display Off (send 20 packets)	20	28	8%	11%
		Display On (send 20 packets)	29	48	11%	19%
46	Control	Home All (send 20 packets)	49	68	19%	27%
		Shutdown (send 80 packets)	69	130	27%	51%
		Audio Sync	131	160	51%	63%
		No shutter channel requirement.				
		Internal Prog 1 scene 1-8 EEPROM	161	171	63%	67%
		Internal Prog 2 scene 9-16 EEPROM	172	182	67%	71%
		Internal Prog 3 scene 17-24 EEPROM	183	193	72%	76%
		Internal Prog 4 scene 25-32 EEPROM	194	204	76%	80%
		Internal Prog 5 scene 33-40 EEPROM	205	215	80%	84%

		Internal Prog 6 scene 41-48 EEPROM	216	226	85%	89%
		Internal Prog 7 scene 49-56 EEPROM	227	237	89%	93%
		TBD	238	255	93%	100%
		Indigo Highlighter Dim Tracking Mode				
		Continuous	0	15	0%	6%
		Periodic Strobe (slow to fast)	16	41	6%	16%
		Random Strobe (slow to fast)	42	67	16%	26%
47	Indigo High-lighter	TBD	68	127	27%	50%
	Function	Indigo Highlighter Independent Dim Mode				
		Continuous	128	143	50%	56%
		Periodic Strobe (slow to fast)	144	169	56%	66%
		Random Strobe (slow to fast)	170	195	67%	76%
		TBD	196	255	77%	100%
48	Indigo High-lighter	Indigo Highslighter Off	0		0%	
	Dim	Indigo Highlighter 100%	255		100%	

Error Codes

When you turn on the fixture, it will complete a start-up procedure. The display may show“Err channel is XX” if there are problems with one or more channels. “XX” stands for channel 1, 2, 3, 4, 5, 6 who has the testing sensor for positioning. For example, when the display shows “Err channel is Color wheel”, it means there is some error in channel 1. If there are some errors on channel 1, channel 3, channel 7 at the same time, you may see the error message “Err channel is Pan movement”, “Err channel is Tilt movement”, “Err channel is Dimmer” flash repeated for 2 times, and then the fixture will generate a second reset. If the fixture remain error message after performing reset more than 2 times, only the channels which have errors can not work properly, others can work as usual. Please contact support if detailed assistance is needed.

PAN- movement Er

(PAN-yoke movement error) This message will appear after the reset of the fixture if the yoke’s magnetic-indexing circuit malfunction (sensor failed or magnet missing) or the stepping-motor is defective (or its driving IC on the main PCB). The PAN- movement is not located in the default position after the reset.

TILT- movement Er

(TILT-head movement error) This message will appear after the reset of the fixture if the head’s magnetic-indexing circuit malfunctions (sensor failed or magnet missing) or the stepping-motor is defective (or its driving IC on the main PCB). The TILT- movement is not located in the default position after the reset.

Gobo Wheel 1 Er

(Gobo Wheel 1- error) This message will appear after the reset of the fixture if the magnetic-indexing circuit malfunction (sensor failed or magnet missing) or the stepping-motor is defective (or its driving IC on the main PCB). The Gobo Wheel 1 is not located in the default position after the reset.

Gobo Rot. 1 Er

(Gobo Rot. 1- error) This message will appear after the reset of the fixture if the magnetic-indexing circuit malfunction (sensor failed or magnet missing) or the stepping-motor is defective (or its driving IC on the main PCB). The Gobo Rot. 1 is not located in the default position after the reset.

Gobo Wheel 2 Er

(Gobo Wheel 2- error) This message will appear after the reset of the fixture if the magnetic-indexing circuit malfunction (sensor failed or magnet missing) or the stepping-motor is defective (or its driving IC on the main PCB). The Gobo Wheel 2 is not located in the default position after the reset.

Focus Er

(Focus - error) This message will appear after the reset of the fixture if the magnetic-indexing circuit malfunction (sensor failed or magnet missing) or the stepping-motor is defective (or its driving IC on the main PCB). The Focus is not located in the default position after the reset.

CMY Er

(CMY - error) This message will appear after the reset of the fixture if the magnetic-indexing circuit malfunction (sensor failed or magnet missing) or the stepping-motor is defective (or its driving IC on the main PCB). The CMY is not located in the default position after the reset.

Iris Er

(Iris - error) This message will appear after the reset of the fixture if the magnetic-indexing circuit malfunction (sensor failed or magnet missing) or the stepping-motor is defective (or its driving IC on the main PCB). The Iris is not located in the default position after the reset.

Zoom Er

(Zoom - error) This message will appear after the reset of the fixture if the magnetic-indexing circuit malfunction (sensor failed or magnet missing) or the stepping-motor is defective (or its driving IC on the main PCB). The Zoom is not located in the default position after the reset.

Color Er

(Color - error) This message will appear after the reset of the fixture if the magnetic-indexing circuit malfunction (sensor failed or magnet missing) or the stepping-motor is defective (or its driving IC on the main PCB). The Color is not located in the default position after the reset.