

GLOW[®]

BUMBLEBEAM™



USER MANUAL

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Rev 1.1

Safety Information



WARNING!

Read the safety precautions in this manual before installing, operating or servicing this product.

Safety Notes



Read all the following Safety Notes before working with this product. These notes include important information about the installation, usage, and maintenance of this product.

This product contains no user-serviceable parts. Any reference to servicing in this User Manual will only apply to properly trained GLOW® Professional certified technicians. Do not open the housing or attempt any repairs.

All applicable local codes and regulations apply to proper installation of this product.

Personal Safety

- Avoid direct eye exposure to the light source while the product 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.
- Do not touch this product's housing during operation 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. (IP20)
- Mount this product in a location with adequate ventilation, at least 20 in (50 cm) from adjacent surfaces.
- Make sure there are no flammable materials close to this product while it is operating.
- Always carry this product by the handles. Do not carry from the head.
- When hanging this product, always secure to a fastening device using a safety cable.

Safety Information

Power And Wiring	<ul style="list-style-type: none">· Always make sure you are connecting this product to the proper voltage in accordance with the specifications in this manual or on the product's specification label.· Never connect this product to a dimmer pack or any rheostat.· Never disconnect this product by pulling or tugging on the power cable.
Operation	<ul style="list-style-type: none">· Do not operate this product if you see damage to the housing, lenses, ultraviolet filter, or cables. Have the damaged parts replaced by an authorized technician at once.· Do not cover the ventilation slots when operating to avoid internal overheating.· Do not aim this product toward the Sun. The lenses could concentrate the solar energy and cause internal overheating.· The maximum ambient temperature is 120 °F (49 °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 GLOW® product may require service, contact

GLOW® Technical Support.

Introduction

The GLOW® Professional Bumble Beam™ is a high-performance moving-head lighting fixture equipped with an HRI 2R 132W lamp. It's compact design makes it ideal for venue installations, and small to mid sized stage and concerts.

The fixture features a rotating and indexing gobo wheel with 14 gobos, a color wheel with 14 color filters. High grade, smooth mechanical step motors are fitted for seamless movement of all mechanical parts. The GLOW® Professional Bumble Beam™ also features pan/tilt feedback, coarse and fine control of movement and effects, a range of built-in movement and effect macros, prism effects, motorized focus, as well as frost filter and strobe effects.

The fixture can be controlled using any DMX-compliant controller as well as automatic mode and sound to light mode.

Before using the product for the first time

1. Read 'Safety information' on page 4 before installing, operating or servicing the fixture.
2. Unpack and ensure that there is no transportation damage before using the fixture. Never attempt to operate a damaged fixture.
3. If the fixture is not going to be hard-wired to a mains supply, attach a local power plug to the end of the supplied power cable.
4. Before operating, ensure that the voltage and frequency of the power supply match the power requirements of the fixture.
5. Check the GLOW® Professional Bumble Beam™ website for the most recent user documentation and technical information about the fixture.

Note that whenever AC power is applied to the fixture, it will reset all effects and functions to their home positions. The fixture head will move. This process usually takes around 15 seconds. On hot strike the fixture will wait for lamp for a Maximum of 70 seconds.

Maximizing lamp life

To obtain maximum operating life from the fixture's discharge lamp:

- Each time you power the lamp on, allow it to warm up for at least 5 minutes before you power it off.
- Before shutting down power completely, power the lamp off but leave power applied to the fixture for a few minutes so that cooling fans can prevent any momentary lamp temperature increase caused by heat from surrounding components.

Installation



Warning! Read ‘Safety information’ on page 4 before installing the fixture.

The fixture is designed for indoor use only and must be used in a dry location with adequate ventilation. Ensure that none of the fixture’s ventilation slots are blocked and ensure that the fixture is fastened to a secure structure or surface. Do not use the fixture to illuminate surfaces less than 8 m (appx 26ft.) from the fixture.

Fastening the fixture to a flat surface

The fixture can be fastened to a hard, fixed, flat surface that is oriented at any angle. Ensure that the surface and all fasteners used can support at least 10 times the weight of all fixtures and equipment they will support. Fasten the fixture securely. Do not stand it on a surface or leave it where it can be moved or fall over. If you install the fixture in a location where it may cause injury or damage if it falls, secure it as directed below with a securely anchored safety cable that will hold the fixture if the primary fastening method fails.

Mounting the fixture on a truss

The fixture can be clamped to a truss or similar rigging structure in any orientation. When installing the fixture hanging vertically down, you can use an open-type clamp such as a G-clamp. When installing in any other orientation, you must use a half-coupler clamp that completely encircles the truss or pipe circumference.



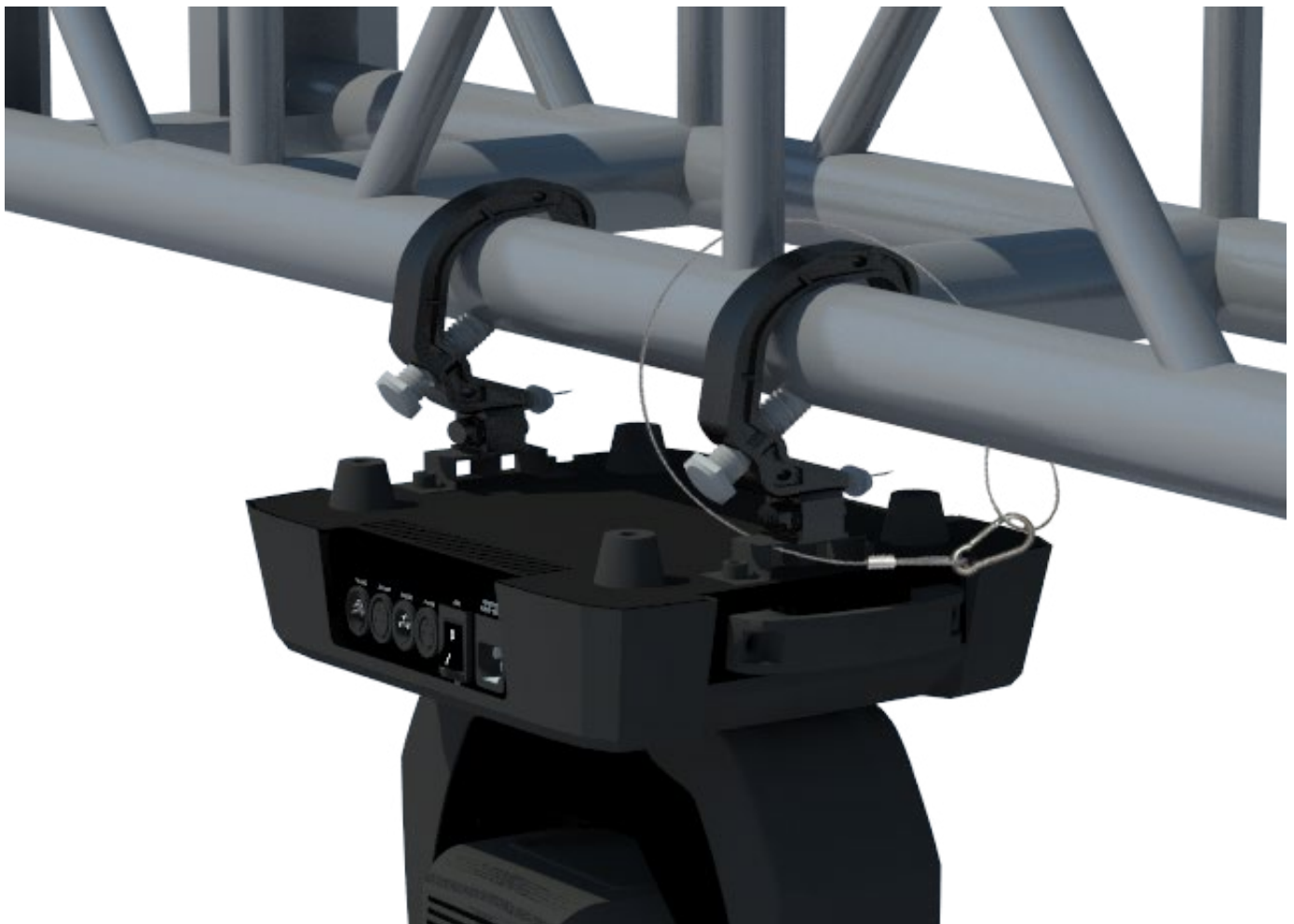
To clamp the fixture to a truss:

1. Check that the rigging structure can support at least 10 times the weight of all fixtures and equipment to be installed on it.
2. Block access under the work area.

3. Working from a stable platform, hang the fixture on the truss and fasten the rigging clamps onto the truss.
4. Secure the fixture with a safety cable as directed below.
5. Check that the head will not collide with other fixtures or objects.

Securing with a safety cable

Secure the fixture with a safety cable (or other secondary attachment) that is approved for the weight of the fixture so that the safety cable will hold the fixture if a primary attachment fails. Loop the safety cable through and around a secure metal anchoring point.



AC Power



Warning! Read ‘Safety information’ on page 4 before connecting the fixture to AC mains power.

For protection from electric shock, the fixture must be grounded (earthed). The power distribution circuit must be equipped with a fuse or circuit breaker and ground-fault (earth-fault) protection.

Socket outlets or external power switches used to supply the fixture with power must be located near the fixture and easily accessible so that the fixtures can easily be disconnected from power.

Do not insert or remove power cable to apply or cut power, as this may cause arcing at the terminals that will damage the connectors.

Do not use an external dimming system to supply power to the fixture, as this may cause damage to the fixture that is not covered by the product warranty.

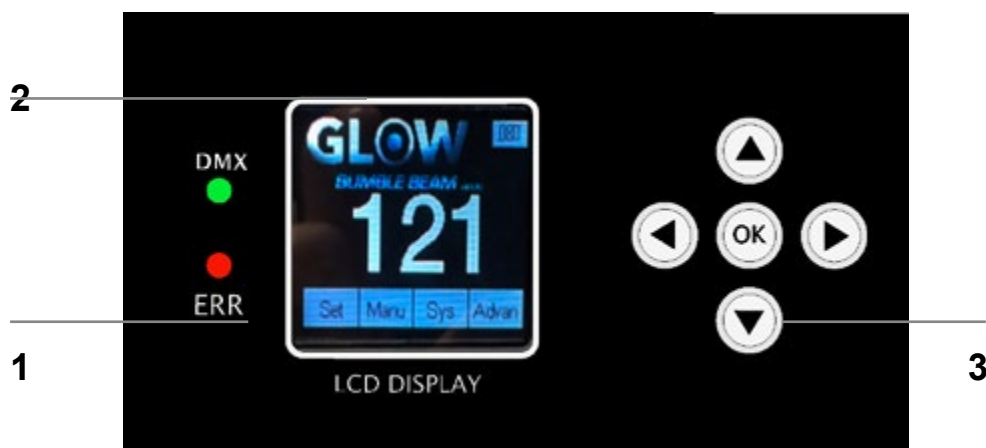
The fixture can be hard-wired to a building electrical installation if you want to install it permanently, or a power plug (not supplied) that is suitable for the local power outlets can be installed on the power cable.

If you replace power plug on the power cable, install a grounding type (earthed) plug with integral cable grip that is rated minimum 250 V, 5 A.

The fixture has an auto-ranging power supply that accepts AC mains power at

100-240 V at 50/60 Hz. Do not apply AC mains power at any other voltage or frequency to the fixture.

Fixture overview



1 - LEDs

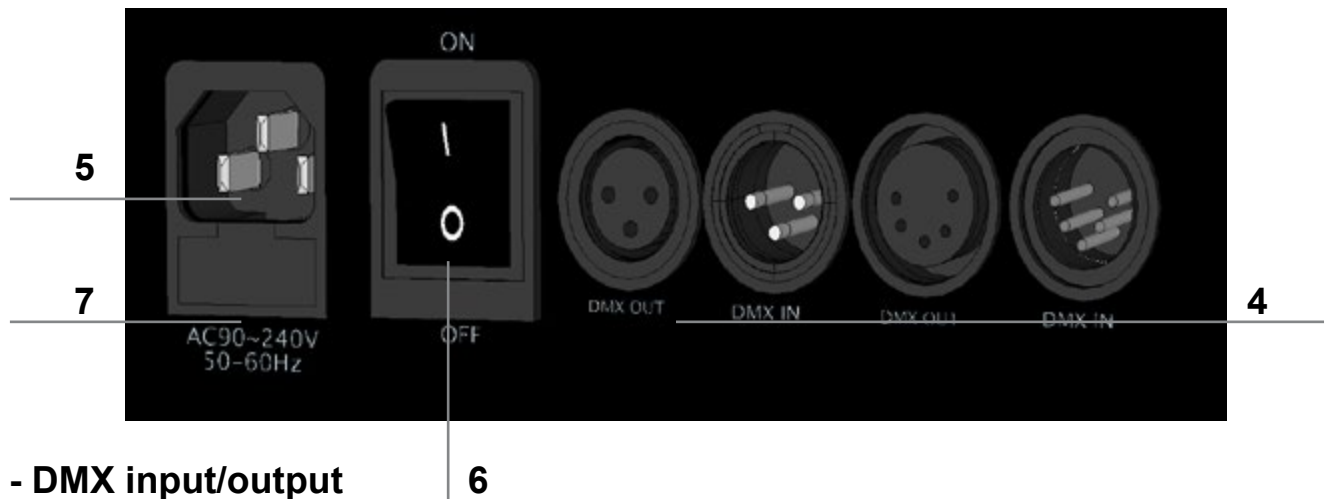
The LEDs on the front of the base give the following indications:

DMX	Valid DMX signal present
ERR	Error signal present

2 – Display

3 – Buttons

UP	Press UP for selection
DOWN	Press DOWN for selection
LEFT	Press LEFT for selection
RIGHT	<ul style="list-style-type: none"> • Activate the menu mode functions, or • Return to the previous level of the menu structure, or • Hold to exit the menus
OK	Complete selected function



4 - DMX input/output

3 and 5-pin XLR sockets are provided for DMX input and output (throughput).

5 – AC mains power input

6 – Power on/off switch

7 – Fuse

The T5A fixture fuse is located in a fuseholder below the power switch. An extra fuse is attached to the fuse holder for quick replacement.

Control data link

A DMX 512 data link is required in order to control the fixture via DMX. The fixture has 3-pin and 5-pin XLR connectors for DMX data input and output. The number of daisy-chained fixtures is limited by the number of DMX channels required by the fixtures in relation to the maximum 512 channels available in one DMX universe. Note that if independent control of a fixture is required, it must have its own DMX channels. Fixtures that are required to behave identically can share the same DMX address and channels. To add more fixtures or groups of fixtures when the above limit is reached, add a DMX universe and another daisy-chained link.

Connecting the DMX data link

To connect the fixture to data:

1. Connect the DMX data output from the controller to the first fixture's male XLR DMX input connector.
2. Connect the first fixture's DMX output to the DMX input of the next fixture and continue connecting fixtures output to input.

Fixture setup

This section explains the fixture settings and utilities that the user has access to via the control panel.

Settings are retained when the fixture is powered off.

Using the control menus

To access the control menus, press the OK button. Navigate the menu structure using the OK, LEFT and RIGHT buttons. Select any required menu option using the OK button. To return to the previous level in the menu structure without making a change, press the RIGHT button.

To exit the menus, press and hold the RIGHT button.

DMX function settings

DMX function settings include the DMX address and a DMX value viewer.

DMX addressing

The fixture can be controlled using signals sent by a DMX controller. Each DMX-controlled fixture must have a DMX address set. If a fixture has its DMX address set to 1, for example(in 16 channels mode), then it uses channels 1 to 16. The next fixture on the DMX link can have its DMX address set to 17, the next to 33 and so on until the 512 channels in one DMX universe are allocated.

For independent control, each fixture must be assigned its own control channels. Two fixtures of the same type may share the same address, if identical behavior is desired. Address sharing can be useful for diagnostic purposes and symmetric control, particularly when combined with the inverse pan and tilt options.

To set the fixture's DMX address:

1. In the control panel, select SET and press ENTER.
2. Use the UP and DOWN buttons to select DMX ADDRESS and press OK to confirm. The present address will blink on the display.
3. Use the UP and DOWN buttons to select the address (1 to 512).
4. Once the address has been selected, press OK to set it (or press LEFT to exit without making a change).

DMX viewer

You can check the DMX values that the fixture is receiving on each DMX channel in the VIEW DMX VALUE menu.

To see the DMX values:

1. Select DMX FUNCTIONS and press ENTER.
2. Use the UP and DOWN buttons to select VIEW DMX VALUE and press ENTER.
3. Use the UP and DOWN buttons to scroll through the DMX channels and press ENTER to select a channel. The fixture will display the DMX value it is receiving on that channel.
4. Press MENU to exit the viewer.

Fixture settings

Pan and/or tilt inversion

The FIXTURE SETTINGS PAN INVERSE and TILT INVERSE menus can be used to reverse the direction of pan and/or tilt. These settings are useful for symmetrical effects with multiple fixtures, or when coordinating the movement of fixtures that are floor mounted and rigged upside down.

To adjust the pan inversion settings:

1. Select FIXTURE SETTINGS and press ENTER to confirm.
2. Use the DOWN and UP buttons to select PAN INVERSE or TILT INVERSE and press OK to confirm.
3. Use the DOWN and UP buttons to select the YES (inversion) or NO (normal) mode.
4. Press OK to set (or press RIGHT to exit without making a change).

Lamp settings

Lamp on/off

To turn the lamp on or off via the control panel:

1. Select LAMP SETTINGS and press ENTER to confirm.
2. Use the DOWN and UP buttons to select ON/OFF and press OK to confirm.
3. Use the DOWN and UP buttons to select ON or OFF.
4. Press OK to confirm (or press RIGHT to exit without making a change).

State/power on

To set whether the fixture should power the lamp on automatically when the fixture is powered on:

1. Select LAMP SETTINGS and press OK to confirm.
2. Use the DOWN and UP buttons to select STATE/POWER ON and press OK to confirm.
3. Use the DOWN and UP buttons to select ON or OFF.
4. Press OK to confirm (or press RIGHT to exit without making a change).

Display settings

Invert display

To invert the display:

1. Press LEFT then UP.
2. Press OK to confirm.



Manual settings

You can run an automatic test of all functions, or manually test individual functions from the control menus.

Auto mode

To turn on an auto mode:

1. Select “SET” and press OK to confirm.
2. Use the UP and DOWN buttons to select MODE and press OK to change the mode.
3. Use the UP and DOWN buttons to select auto mode and press OK to confirm. The automatic mode will run.

Manual mode

Fixture functions can be tested or controlled without a DMX signal:

1. Select FIXTURE TEST and press ENTER to confirm.
2. Use the DOWN and UP buttons to select MANUAL TEST and press OK to confirm.
3. Select and activate the functions you wish to control.
4. Press MENU to exit.

Fixture information

Fixture operating hours counter

To display the total number of hours the fixture has been used:

1. Select FIXTURE INFORMATION and press ENTER to confirm.
2. Use the DOWN and UP buttons to select FIXTURE USE TIME and press OK to confirm. The number of hours is shown in the display.
3. Press MENU to exit.

Lamp operating hours counter

The resettable lamp operating time counter lets you monitor lamp use and see when lamp replacement is due. The counter is available in the FIXTURE INFORMATION→LAMP ON TIME menu. Do not exceed the specified lamp lifetime, or the lamp may explode. Reset the counter when you replace the lamp.

Firmware version

To display the software version installed in the fixture:

1. Select FIXTURE INFORMATION and press OK to confirm.
2. Use the DOWN and UP buttons to select FIRMWARE VERSION and press ENTER to confirm. The firmware version is shown in the display.
3. Press MENU to exit.

Reset functions or effects

The various effects—pan, tilt color, gobos, iris, focus, prism—or all effects, can be manually reset to their home positions:

1. Select RESET FUNCTIONS and press OK to confirm.
2. Use the DOWN and UP buttons to select the function or effect that is to be reset. Press OK.
3. Use the DOWN and UP buttons to select YES and
4. Press OK to confirm (or press RIGHT to exit without making a change).

Calibration

Calibration menu

You can calibrate any of pan, tilt, gobo, color, focus, dimmer, effect speed positions.

To adjust an effect home position offset:

1. Select “Advanced” then press OK button to enter the Advanced Settings.
2. Enter password: UP, DOWN, UP, DOWN
3. Select “Reset Calibration”, press OK to enter
4. Use UP and Down buttons to select parameter you want to calibrate then press OK
5. Once the correct position has been reached, press ENTER to confirm (or press RIGHT to exit without saving).

Effects

This section describes DMX-controllable effects that require particular explanation. See DMX protocol on page 28 for a full list of the DMX channels and values required to control the different effects.

Note that if a fixture loses its DMX signal it will maintain its current effect until powered off or reset.

Pan and tilt

The fixture's moving head can be panned through 540° and tilted through 270° using coarse or fine control channels. A range of pan/tilt macros is available.

The fixture incorporates pan and tilt feedback, so that if correct pan or tilt position is lost, the shutter closes and the fixture resets to the correct position. This feature can be enabled or disabled as required (see 'Control menus' on page 27).

Function channel

The function DMX channel lets you adjust certain fixture settings via DMX. This can be useful if access to the fixture's control panel is difficult or inconvenient when the fixture is installed.

Dimming

Full range mechanical dimming is provided. Highly sensitive step motors ensure a linear transparent dimming curve.

Frost filter

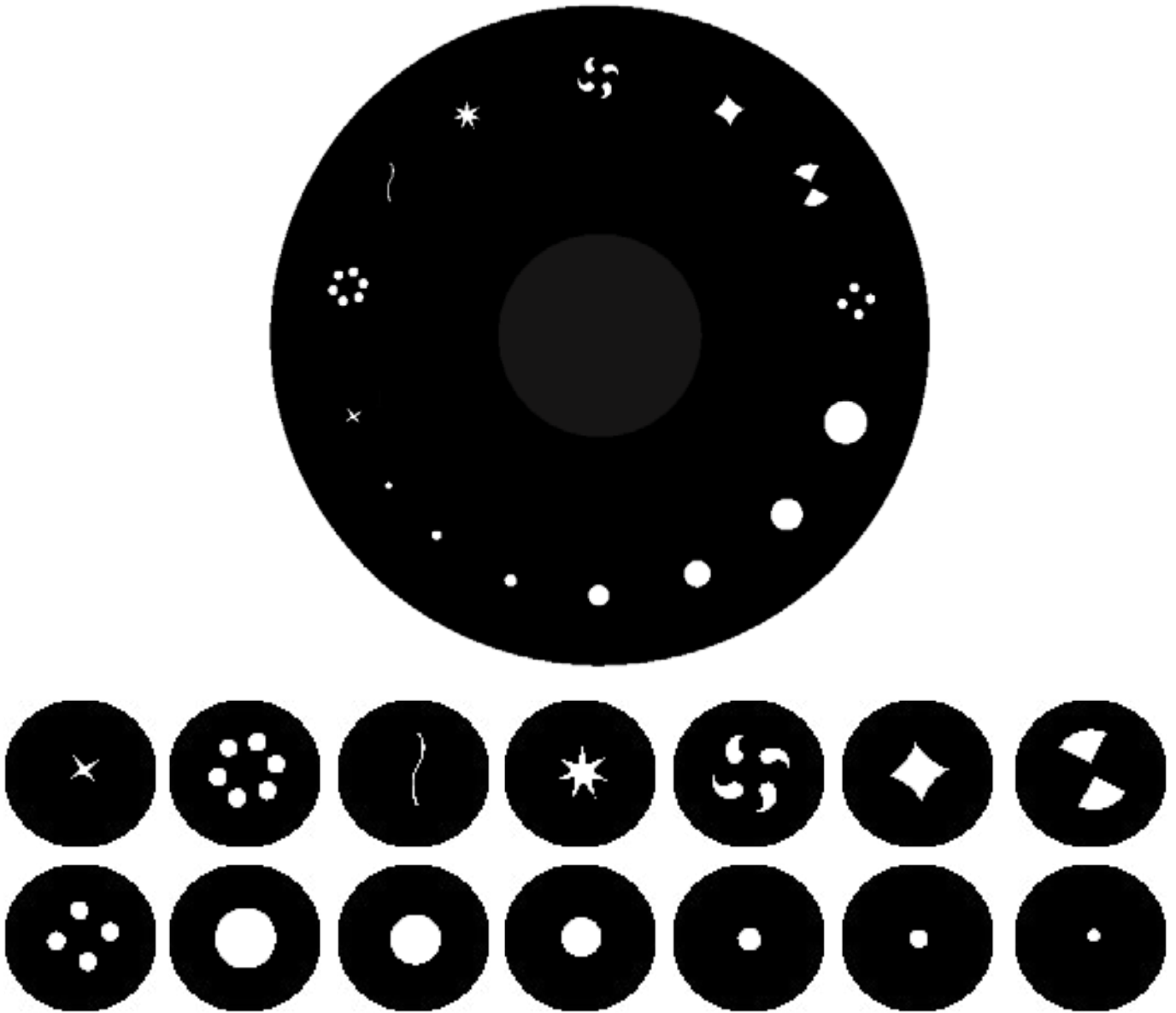
The frost filter softens and diffuses the projection.

Strobe effects

A range of variable speed and random shutter/strobe effects are provided.

Gobos

The fixture contains a rotating wheel with 14 fixed gobos:



Any gobo can be projected statically, or the wheel can be rotated clockwise or counter-clockwise with variable speed, and index as well. The sharpness of gobo projections can be adjusted via DMX using the focus channel.

Prism

The fixture incorporates an 8-facet prism that can be inserted into the beam to provide split beam effects. The prism can be set to an indexed position or rotated clockwise or counter-clockwise. A range of prism macros and movement effects are provided.

Features

- Bright, punchy beam with 78,700 lux @ 15 m using 132W HRI lamp
- 17 gobos with continuous variable wheel scroll
- 8-facet Prism, independently controllable for amazing gobo effects
- Color wheel with 14 colors, split color ability, and continuous variable-speed scrolling
- 3- and 5-pin DMX input/output connections
- Simple and complex DMX channel profiles for programming versatility



Maintenance



Warning! Read 'Safety information' on page 4 before servicing the fixture.

Refer any service operation not described in this user manual to a qualified service technician.

Disconnect the fixture from mains power and allow to cool completely before cleaning or servicing.

Service fixtures in an area where there is no risk of injury from failing parts, tools or other materials.

Excessive dust, smoke fluid, and particle buildup degrades performance, causes overheating and will damage the fixture. Damage caused by inadequate cleaning or maintenance is not covered by the product warranty.

Cleaning

The cleaning of external optical lenses must be carried out periodically to optimize light output. Cleaning schedules for lighting fixtures vary greatly depending on the operating environment. It is therefore impossible to specify precise cleaning intervals for the fixture. Environmental factors that may result in a need for frequent cleaning include:

- Use of smoke or fog machines.
- High airflow rates (near air conditioning vents, for example).
- Presence of cigarette smoke.
- Airborne dust (from stage effects, building structures and fittings or the natural environment at outdoor events, for example).

If one or more of these factors is present, inspect fixtures within their first 100 hours of operation to see whether cleaning is necessary. Check again at frequent intervals. This procedure will allow you to assess cleaning requirements in your particular situation.

Use gentle pressure only when cleaning, and work in a clean, well-lit area. Do not use any product that contains solvents or abrasives, as these can cause surface damage.

To clean the fixture:

1. Disconnect the fixture from power and allow it to cool for at least 10 minutes.
2. Vacuum or gently blow away dust and loose particles from the outside of the fixture and the air vents at the back and sides of the head and in the base with low-pressure compressed air
3. Clean lenses by wiping gently with a soft, clean lint-free cloth moistened with a weak detergent solution. Do not rub the surface hard: lift particles off with a soft repeated press. Dry with a soft, clean, lint-free cloth or low pressure compressed air. Remove stuck particles with an unscented tissue or cotton swab moistened with glass cleaner or distilled water.
4. Check that the fixture is dry before reapplying power.

Lamp replacement



Warning! Wear safety glasses and gloves when handling lamps.

To avoid the risk of a discharge lamp exploding in the fixture, replace the lamp when it reaches its expected lifetime.

Install only lamps that are approved by GLOW® Professional for this fixture.

The lamp must be perfectly clean and totally free of oil and grease. Never touch the lamp with bare hands.

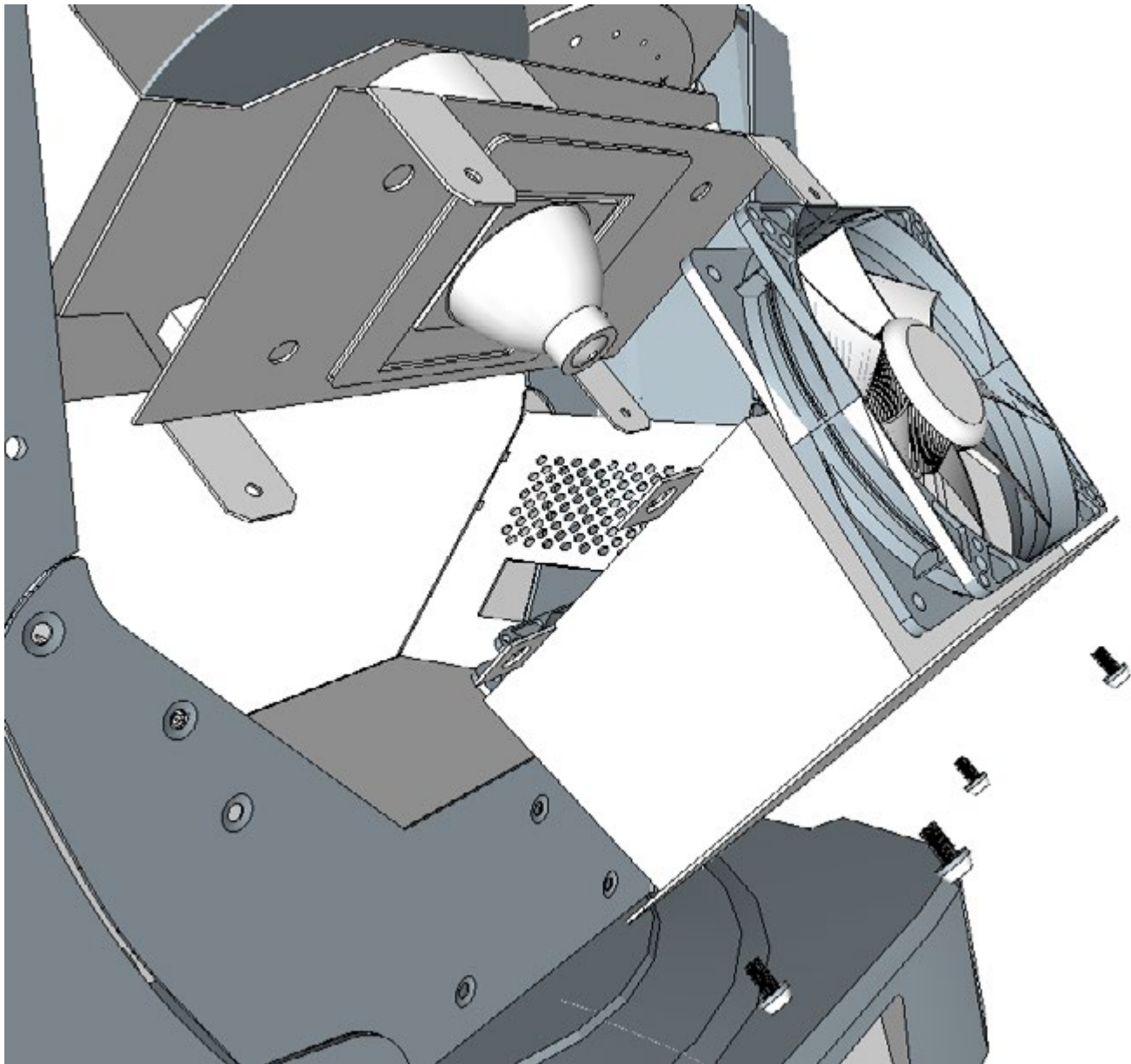
If you contaminate the lamp, clean it with an alcohol wipe and then dry it with a lint-free cloth.

For best results the lamp can be adjusted to obtain the best projection.

Please follow the instructions below to replace the lamp:

1. Disconnect the fixture from power and allow it to cool for two hours.
2. Remove the fixture head covers using a Phillips screwdriver.
3. Position the head as shown below and remove the lamp cooling fan at the rear of the head
4. Lift the lamp out of its recess.
5. Disconnect the lamp and connect the replacement lamp. Only use only a lamp that is approved by GLOW® Professional.
6. Place the new lamp into the lamp recess.
7. See illustration below. Adjust the lamp using a slotted (flat head) screwdriver until it is centralized.
8. Reinstall the fan and secure it.

9. Replace and secure the head covers before reapplying power.
10. Reset the lamp hour counter using the control panel.



Replacing the primary fuse

If the fixture is completely dead, the fixture's primary fuse T5 may have blown and it may be necessary to install a new fuse. This fuse is located in a fuseholder next to the power ON/OFF switch on the connections panel. See 'Fixture overview' on page 12.

If you need to replace a fuse:

Disconnect the fixture from power and allow it to cool for at least 10 minutes.

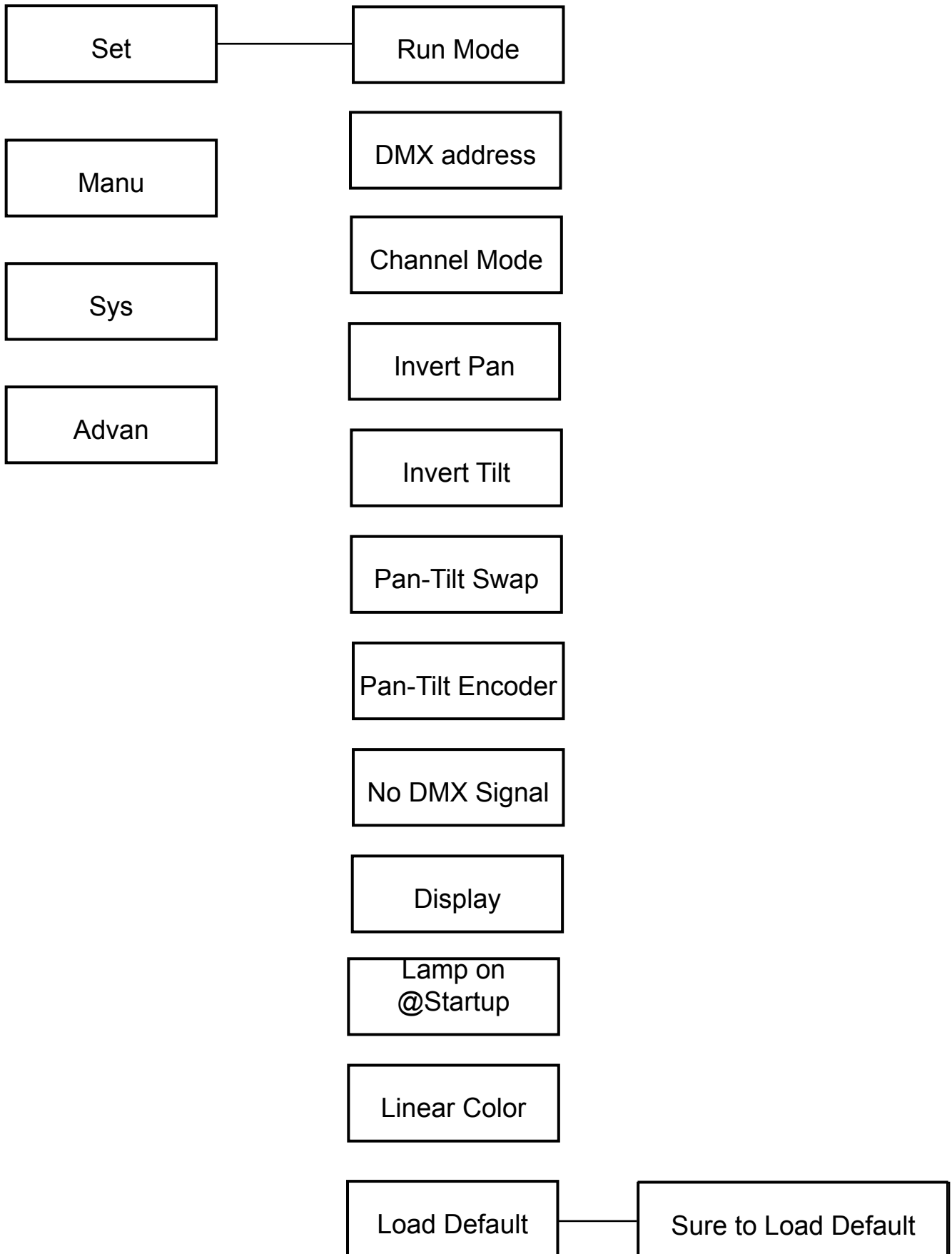
1. Pull the cap of the fuseholder and remove the fuse. Replace with a fuse of the same size and rating only.
2. Reinstall the fuseholder cap before reapplying power.

Other service and repairs

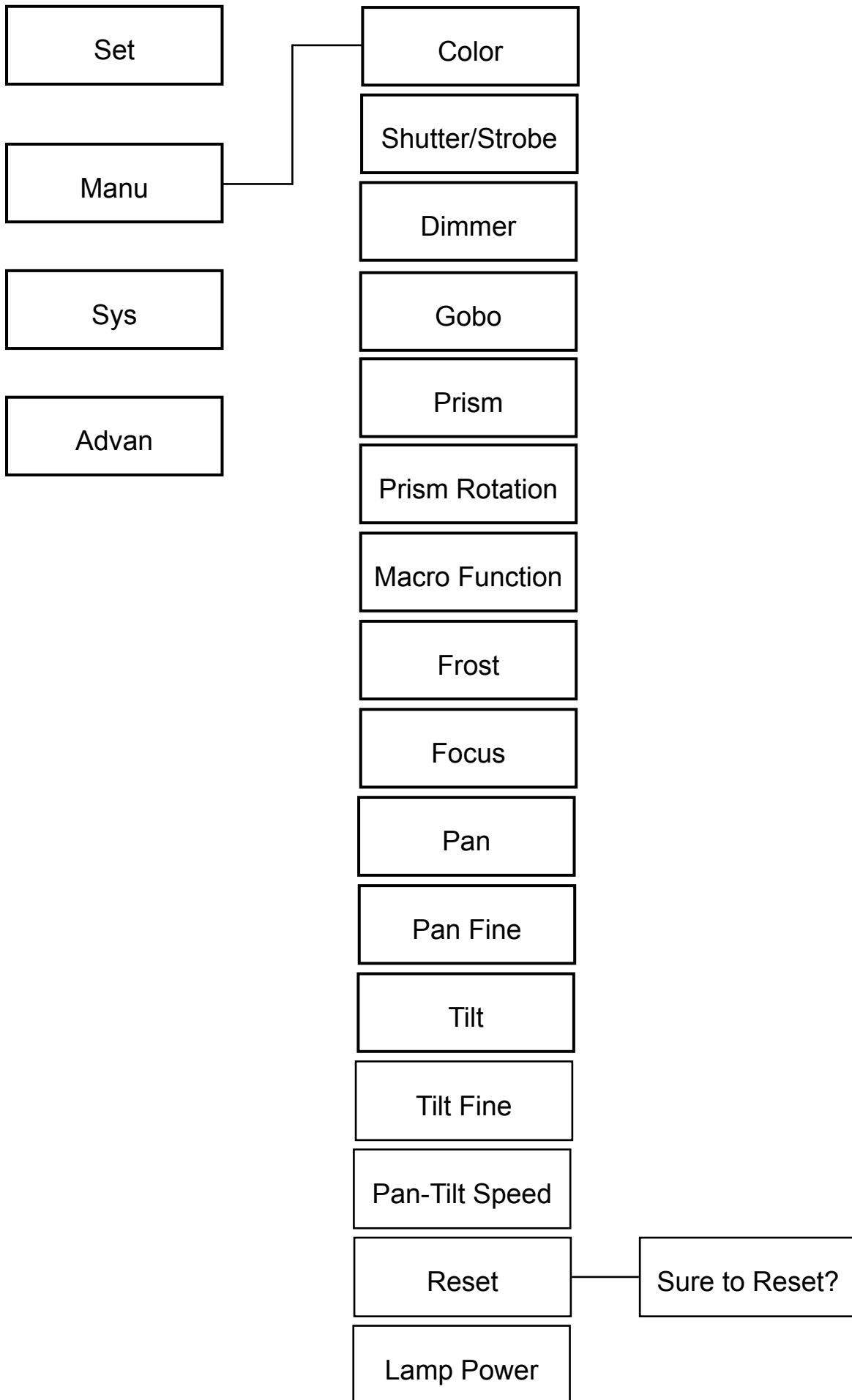
There are no user-serviceable parts inside the fixture. Do not open the housing. Never try to repair the fixture yourself, as this may result in damage or malfunction, and it may void your product warranty. Service operations not described in this manual may only be carried out by an authorized GLOW® Professional Bumble Beam™ service agent.

Installation, on-site service and maintenance can be provided worldwide by the GLOW® Professional and its approved agents, giving owners access to GLOW® Professional expertise and product knowledge in a partnership that will ensure the highest level of performance throughout the product's lifetime. Please contact your GLOW® Professional Bumble Beam™ supplier for details.

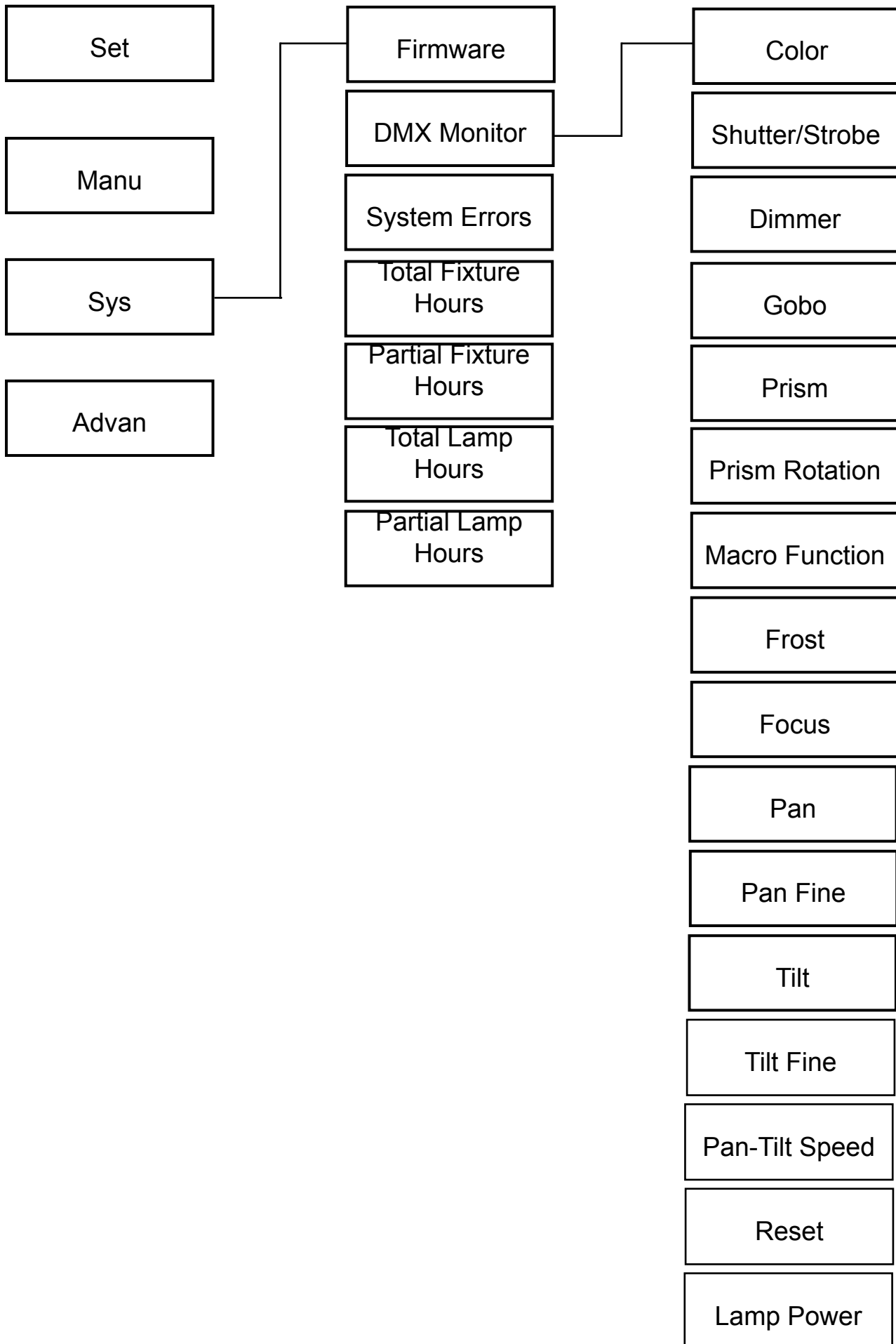
Display Menu Settings



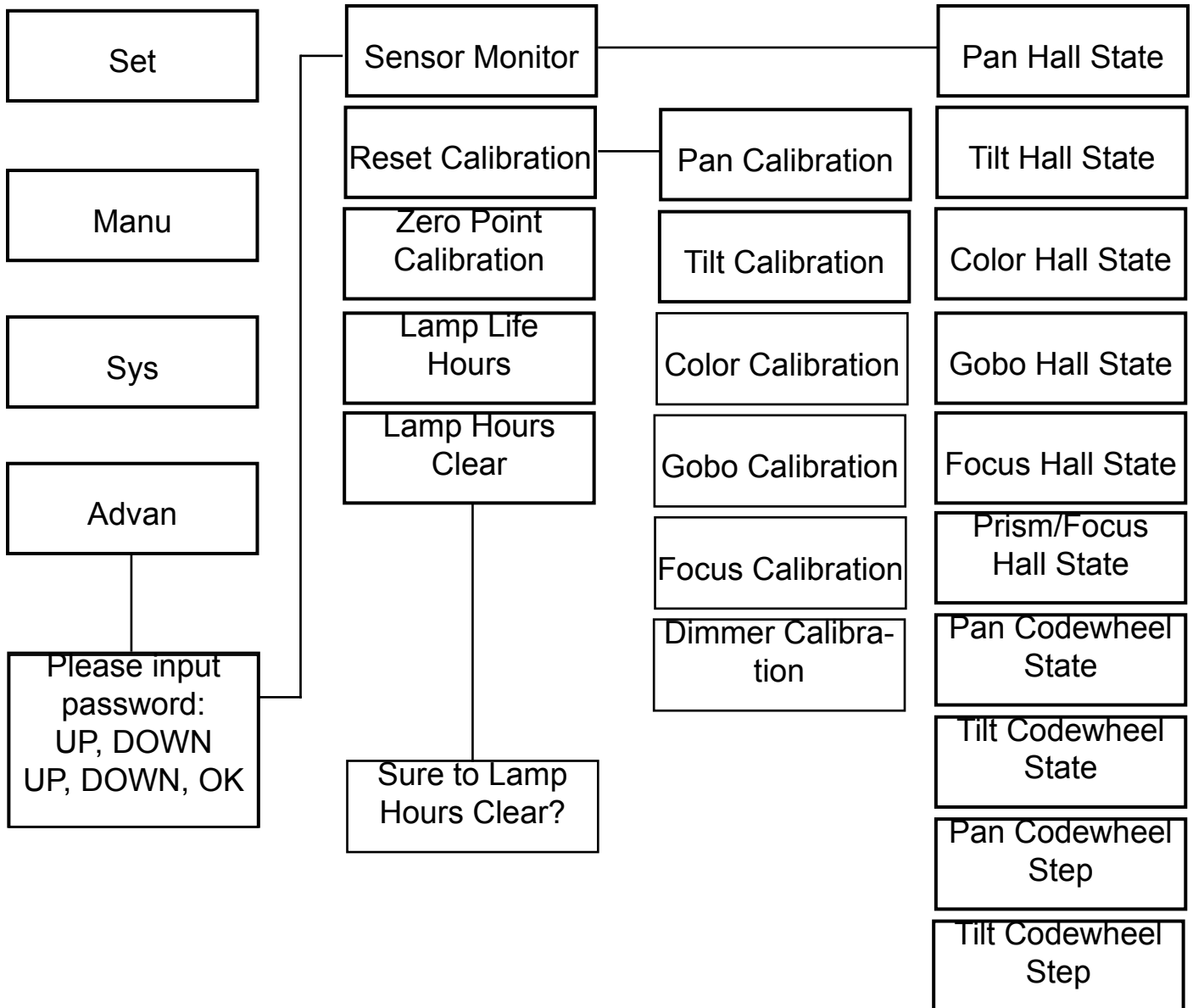
Display Menu Settings



Display Menu Settings



Display Menu Settings



DMX CHART

DMX PROTOCOL		
Channel	16 Channel mode	20 Channel mode
1	COLOR WHEEL	COLOR WHEEL
2	STROBE	STROBE
3	SHUTTER	SHUTTER
4	GOBO	GOBO
5	PRISM	PRISM
6	PRISM ROTATION	PRISM ROTATION
7	MACRO	MACRO
8	FROST	FROST
9	FOCUS	FOCUS
10	PAN	PAN
11	PAN FINE	PAN FINE
12	TILT	TILT
13	TILT FINE	TILT FINE
14	PAN / TILT TIME	PAN / TILT TIME
15	RESET	RESET
16	LAMP CONTROL	LAMP CONTROL
17		RFU
18		COLOR TIME
19		DIMMER PRISM FROST TIME
20		GOBO TIME

COLOR WHEEL (channel 1)	
DMX VALUE	Function
0	White
5	White + Red
10	Red
15	Red + Green
20	Green
25	Green + Blue
30	Blue
35	Blue + Orange
40	Orange
45	Orange + Pink
50	Magenta
55	Magenta + Yellow
60	Yellow
65	Yellow + Lavender
70	Lavender
75	Lavender + Cyan
80	Cyan
85	Cyan + Ice
90	Ice
95	Ice + Light Green
100	Light Green
105	Light Green+ CTO 260
110	CTO 260
115	CTO 260 + Magenta
120	Magenta
125	Magenta + CTB 8000
130	CTB 8000
135	CTB 8000 + White
140-255	Slow Rotation - Fast Rotation

STROBE (channel 2)	
Value	Function
0 - 3	Closed
4 - 207	Slow - Fast Strobe
208 - 212	Open
213 - 225	Random Slow Strobe
226 - 238	Random Medium Strobe
239 - 251	Random Fast Strobe
252 - 255	Open

DIMMER (channel 3)	
Value	Function
0 - 255	0% - 100%

GOBO (channel 4)	
Value	Function
0	OPEN
5	GOBO 1
10	GOBO 2
15	GOBO 3
20	GOBO 4
25	GOBO 5
30	GOBO 6
35	GOBO 7
40	GOBO 8
45	GOBO 9
50	GOBO 10
55	GOBO 11
60	GOBO 12
65	GOBO 13
70	GOBO 14
75 - 129	FAST - SLOW ROTATION
130 - 134	STOP
135 - 185	SLOW - FAST ROTATION
186 - 190	GOBO 1 SHAKE FAST - SLOW
191 - 195	GOBO 2 SHAKE FAST - SLOW
.....	GOBO 3 TO GOBO 13
246 - 250	GOBO 13 SHAKE FAST - SLOW
251 - 255	GOBO 14 SHAKE FAST - SLOW

PRISM (channel 5)	
Value	Function
0 - 127	PRISM OFF
128 - 255	PRISM ON

PRISM ROTATION (channel 6)	
Value	Function
0 - 63	POSITION
64 - 127	SLOW - FAST ROTATION
128 - 191	FAST - SLOW ROTATION
192 - 255	SLOW - FAST ROTATION

Macro Function (channel 7)	
0 - 10	Open White
11 - 80	Color Wheel
81 - 130	Gobo Wheel + Prism rotate left
131 - 155	Shake
156 - 180	Gobo Wheel + Prism rotate right
181 - 185	Gobo Wheel
186 - 190	Shake
191 - 195	Strobe Slow
196 - 200	Shake
201 - 205	Color Wheel
206 - 245	Gobo Wheel + Prism Rotate
246 - 250	Strobe
251 - 255	Gobo + Prism Rotate

FROST (channel 8)	
Value	Function
0 - 127	FROST OFF
128 - 255	FROST ON

FOCUS (channel 9)	
Value	Function
0 - 255	0% - 100%

PAN / TILT SPEED (channel 14)	
Value	Function
0 - 255	FAST - SLOW SPEED

RESET (channel 15)	
Value	Function
0 - 25	UNUSED RANGE
26 - 76	EFFECTS RESET
77 - 127	PAN / TILT RESET
128 - 255	COMPLETE RESET

LAMP CONTROL (channel 16)	
Value	Function
0 - 9	UNUSED RANGE
10 - 100	LAMP OFF
101 - 255	LAMP ON

TIMING CHANNELS

	TIMING CHANNEL	FUNCTION	REMARK
17	RFU	UNUSED	0 - 255 FAST - SLOW SPEED
18	COLOR TIME	COLOR WHEEL	
19	BEAM TIME	DIMMER - PRISM - FROST	
20	GOBO TIME	STATIC GOBO	

Bumble Beam Specifications

Physical

Length:330 mm (13 in.)
Width:229 mm (9 in.)
Height:356 mm (14 in.)
Weight:7 kg (15.4 lbs.)



Lamp

Approved lamp: HRI 132W 2R Lamp
Color temperature: 8000 K
CRI (Color rendering index): 75
Average lifetime: 2000 hours

Dynamic Effects

Color wheel: 14 colors plus open, rotation with variable direction and speed
Static gobo wheel: 17 gobos plus open, wheel rotation and shake
Pre-programmed effects: 31 pan and tilt macros, adjustable speed
Shutter: Strobe effect, pulse effects, instant open and blackout
Prism: 8-facet, rotation and index with variable direction and speed
Frost: Fade in/out
Focus: Motorized
Dimmer: 0 - 100%, four dimming curve options
Pan: 540°, with coarse & fine control and speed, P/T macros
Tilt: 270°, with coarse & fine control and speed, P/T macros

Optics

Beam angle: 1.8°

Control and Programming

Control system: DMX

DMX channels: 16,20

Setting and addressing: USITT DMX512/1990

Pan and tilt speed: Adjustable via onboard control panel and DMX

Head position: Pan/tilt feedback correction

Construction

Color: Black

IP rating: IP 20

Installation

Minimum distance from illuminated surfaces: 12 m (39.4 ft.)

Location: Indoor use only, must be fastened to surface or structure

Mounting points: Two 3/8" nut bases for rigging clamps

Orientation: Any

Connections

AC power input: EURO Cable

DMX data in/out: 3-pin & 5-pin locking XLR

Electrical

AC power: 100-240 V, 50/60Hz

Fuse: T5A

Power supply unit: Auto-ranging electronic switch mode

Typical power and current

110 V, 60 Hz: 1.5 A, 160 W,

230 V, 50 Hz: 0.7 A, 154 W

Measurements made at nominal voltage. Allow for a deviation of +/- 10%.

Thermal

Cooling: Forced air
Maximum ambient temperature (Ta max.): 40° C (104° F)
Minimum ambient temperature (Ta min): -25°C (-13° F)
Total heat dissipation (calculated, +/- 10%): 1200 BTU/hr.

Included Items

3 ft Power cable, User Manual

Specifications are subject to change without notice.
For latest product specifications, see www.Glow-Lighting.com