



Flare Q+ RZ

Operation Manual



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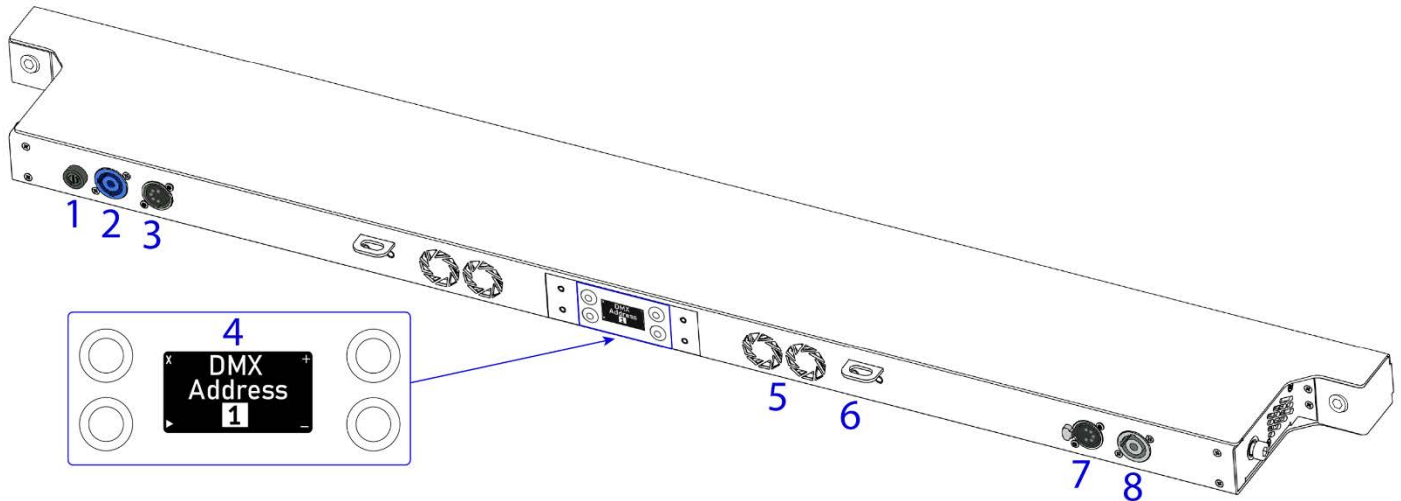
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Overview

Solaris Flare indoor LED fixtures are combination wash/strobe/blinders with class-leading LED RGBW brightness with greater than 9,500 lumens (Rayzr 50 cm) and greater than 19,500 lumens (Rayzr 100 cm). Features include instant color mixing and 1200Hz refresh rate for smooth on-camera dimming. Q+ technology increases the brightness with virtually no additional fan noise.



- | | |
|--|------------------------|
| 1. Fuse | 5. Cooling Fans (x4) |
| 2. Power Input | 6. Safety Hitches (x2) |
| 3. DMX Input | 7. DMX Thru |
| 4. Control panel with LCD screen and 4 control buttons | 8. Power Thru |

Note: Solaris Flare Rayzr Q+ 50 cm has two cooling fans and one safety hitch.

Specifications

Solaris Flare Q+ Rayzr	50 cm	100 cm
Light sources	18 CREE® LEDs (divided in to 6 pixels)	36 CREE® LEDs (divided in to 12 pixels)
Beam Spread	36°, optional beam angles available: 20°, 54°, and 70°	
Colors	R, G, B, W	
Average color wavelength (manufacturer rated)	Red: 625 nm, Green: 530 nm, Blue: 460 nm, White: >5700K	
Refresh rate	1200 Hz	
Intensity control	16-bit or 8-bit	
Operating Voltage	100-240VAC 50/60Hz	
Fuse	2A 250V slow-blow (5x20mm)	4A 250V slow-blow (5x20mm)
Cooling	Air cooling + fan	
Operating temperature	-4 °F - +104 °F (-20 °C - +40 °C)	
DMX channels	3-32 depending on control mode	3-56 depending on control mode
DMX connectors	Input 5-pin XLR male, Thru 5-pin XLR female	
DMX pin configuration	pin 1 shield, pin 2 (data-), pin 3 (data+), pin 4 n/a, pin 5 n/a	
Max. power draw	200 W	400 W
RDM support	Yes	
Power Connector Input	PowerCON 20A blue	
Fixing	Adjustable yoke	
Unit Dimensions (LxWxH)	19.92 x 1.61 x 5.76 in (506 x 41 x 146,5 mm)	39.60 x 1.61 x 5.76 in (1006 x 41 x 146,5 mm)
Shipping Dimensions (LxWxH)	22.25 x 7.67 x 10.62 in (565 X 195 X 270 mm)	41.92 x 7.67 x 10.62 in (1065 X 195 X 270 mm)
Unit Weight	8.16 lb. (3,7 kg)	13.89 lb. (6,3 kg)
Shipping weight	10.58 lb. (4,8 kg)	15.65 lb. (7,1 kg)

Unpacking Instructions

Upon receipt of the fixture, carefully unpack the carton and check the contents to ensure that all parts are present and in good condition. Notify the shipper immediately and retain packing material for inspection if any parts appear to be damaged from shipping or if the carton itself shows signs of mishandling. Save the carton and all packing materials. If a fixture must be returned to the factory, it is important that the fixture be returned in the original factory box and packing.

Power Requirements

Before powering the unit, make sure the line voltage is within the range of accepted voltages. Fixtures operating voltage is 100-240 VAC 50/60Hz. All fixtures must be powered directly from a switched circuit and cannot be operated with a rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer channel is used solely as a 0-100% switch.

When powered up, Solaris performs a preprogrammed internal test. On initial power-up the factory default DMX address appears on the display screen and Solaris is ready for operation. After initial power-up, the last-saved DMX address will appear.

Frequency Settings

Depending on location, change the Default Frequency setting to match the mains power (e.g., US and Canada should be set at 60Hz). Proper frequency setting will ensure minimum number of visible artifacts when using Solaris on camera.

Safety Instructions



Please read these instructions carefully. This user guide contains essential information about the installation, usage and maintenance of this fixture.

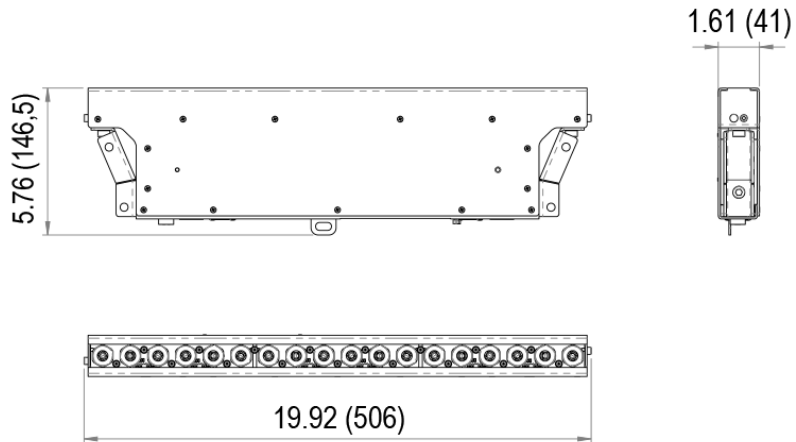
- Please keep this Operation Manual for future reference. If the unit is sold to another user, make sure they also receive this instruction booklet.
- Ensure fixture is connected to proper voltage, and that line voltage is not higher than that stated on the fixture.
- Make sure there are no flammable materials close to the unit while operating.
- Always disconnect from the power source before servicing or fuse replacement. Always use the fuse specified in this manual.
- Always use a safety cable when hanging fixture overhead.
- Maximum ambient temperature (Ta) is 40°C (104°F). Do not operate fixture at temperatures above this rating.
- In the event of a serious operating problem, stop using the unit immediately. Repairs must be carried out by trained, authorized personnel. Contact the nearest authorized technical assistance center. Only OEM spare parts should be used.
- Do not connect the device to a dimmer pack.
- Make sure power cord is never crimped or damaged.
- Never disconnect power cord by pulling or tugging on the cord.
- Avoid direct eye exposure to the light source during operation.

Caution! There are no user serviceable parts inside the unit. Do not open the housing or attempt any repairs yourself. In the unlikely event your unit may require service, please contact your distributor.

Dimensions

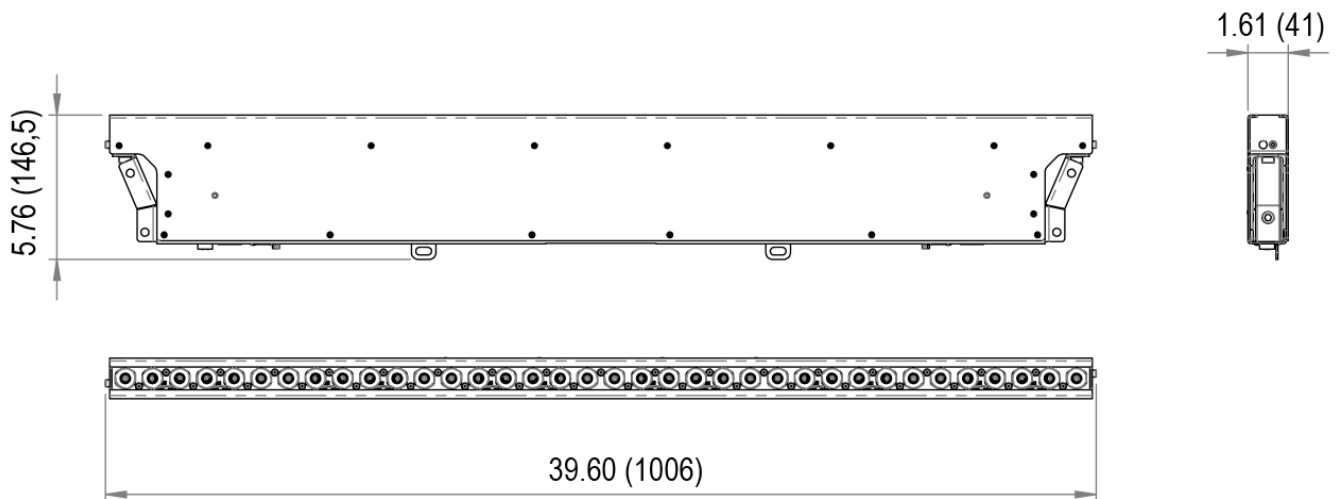
Solaris Flare Q+ Rayzr 50 cm

Dimensions in inches (mm)



Solaris Flare Q+ Rayzr 100 cm

Dimensions in inches (mm)



Setup



Disconnect the power cord before replacing the fuse. Always replace with the correct fuse type.



Fuse Replacement

1. Flare Q+ Rayzr devices use a slow-blow fuse (5x20mm).
 - Flare Q+ Rayzr 50 uses a 2A 250V fuse
 - Flare Q+ Rayzr 100 uses a 4A 250V fuse

To replace a Fuse:

2. With a screwdriver turn the fuse cap counter-clockwise to remove fuse cap with fuse.
3. Replace fuse attached to fuse cap.
4. Reinsert fuse cap with new fuse and tighten clockwise.

Power Linking

Solaris Flare Q+ Rayzr has Neutrik® PowerCon IN and THRU connections allowing power linking (daisy-chaining). Depending on the power provided, you should not exceed the power threshold.

Max. 5 units 100-120V; max. 10 units 208-240V for Flare Q+ Rayzr 50cm.
Max. 3 units 100-120V; max. 6 units 208-240V for Flare Q+ Rayzr 100cm.

Fixture Linking

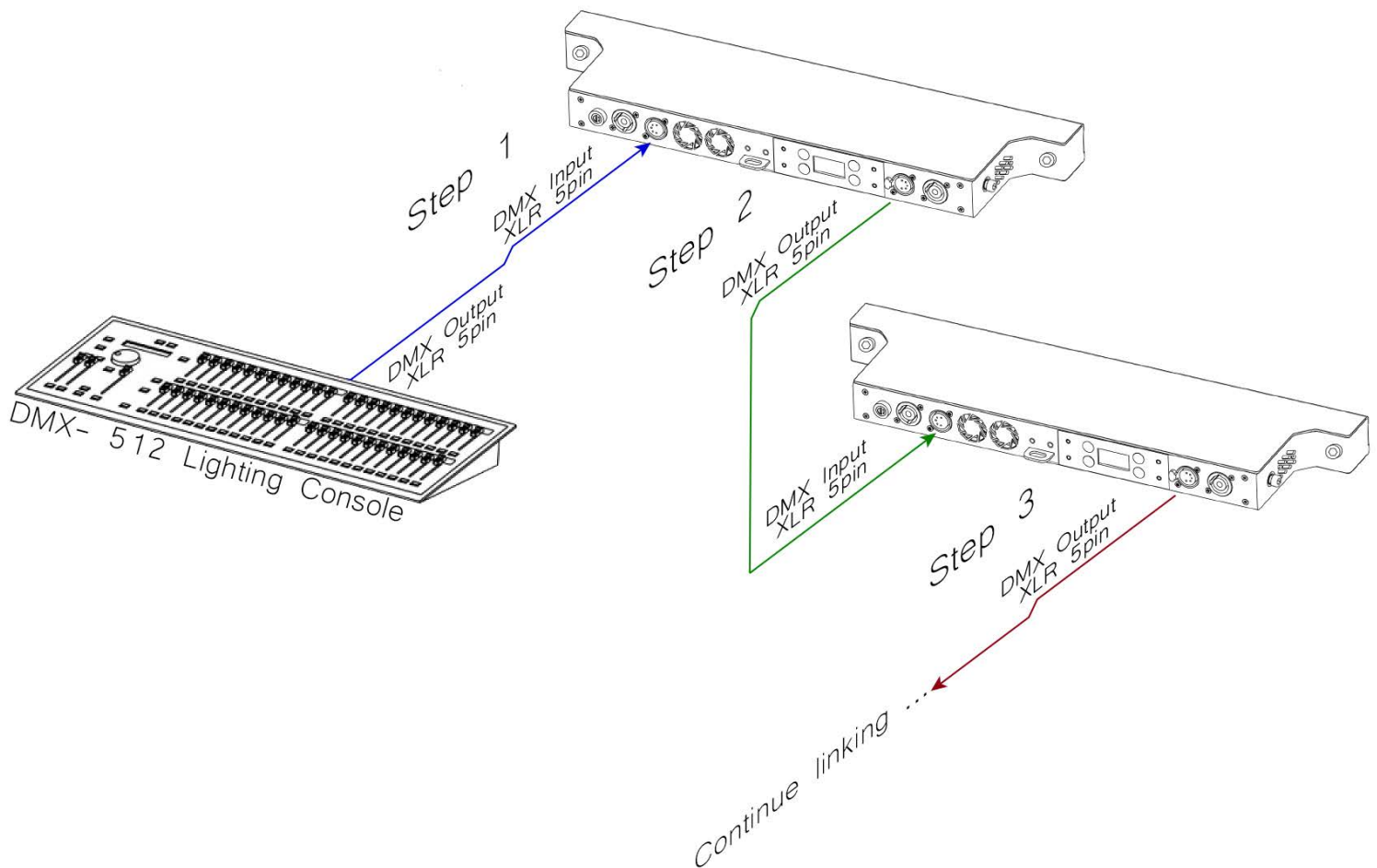
A DMX data link is needed to operate one or more fixtures via a DMX-512 lighting console. The combined number of channels required by all the fixtures on a DMX data link determines the number of fixtures the DMX data link can support.

Important: Fixtures on a DMX data link must be daisy-chained in one single line. To comply with the EIA-485 standard, no more than 32 devices should be connected on one data link. Connecting more than 32 fixtures on one serial data link without the use of a DMX optically-isolated splitter may result in deterioration of the digital DMX signal.

Maximum recommended DMX data link distance between fixtures: 984 ft. (300 meters).

Setting up a DMX Serial Data Link

- 1) Connect the male 5-pin XLR connector of the data cable to the female 5-pin XLR output of the DMX console. Connect the other end of the data cable (female 5-pin XLR) to the male 5-pin XLR connector located on the Solaris Flare.
- 2) Connect from the fixture output as stated above to the input of the following fixture.
- 3) Continue linking until the last fixture is connected in your DMX signal data chain.



Fixture Mounting

Orientation

Flare Q+ Rayzr fixtures may be mounted in any position. Each have a yoke with mounting hole for clamps or couplers. Always make sure there is adequate room for ventilation. Do not obstruct the unit's fan or vents.

Rigging

To avoid possibility of risk, both Rayzr fixtures comes with a hitch to be used with safety cables. Always consult a certified rigging specialist before suspending any fixture overhead!

Use ProBurger® couplers or equivalent C- or O-type clamps for attaching to truss. It is important never to obstruct the fan or vents pathway. Adjust the angle of the fixture by loosening both knobs and tilting the fixture. After finding the desired position, retighten both knobs.



Note!

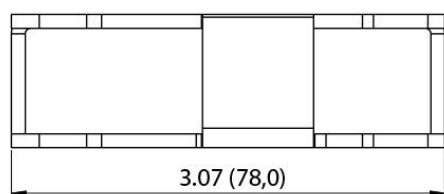
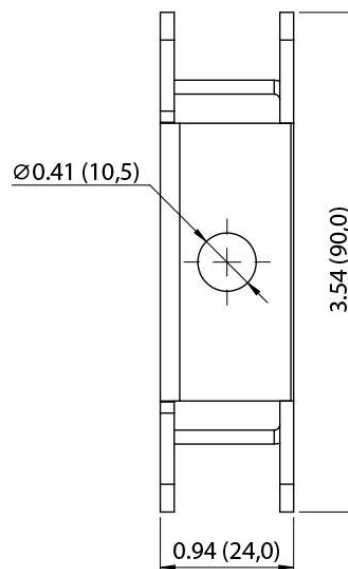
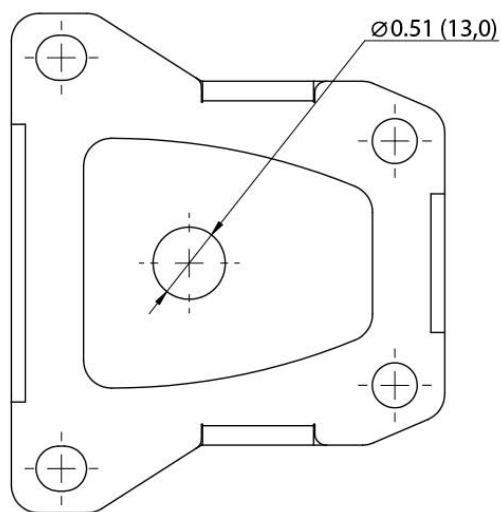
- *Always use safety cables!*
- *When selecting installation location, consider routine maintenance.*
- *Never mount fixture where it will be exposed to moisture, excessive humidity, extreme temperatures, or restricted ventilation.*

Fixture accessories

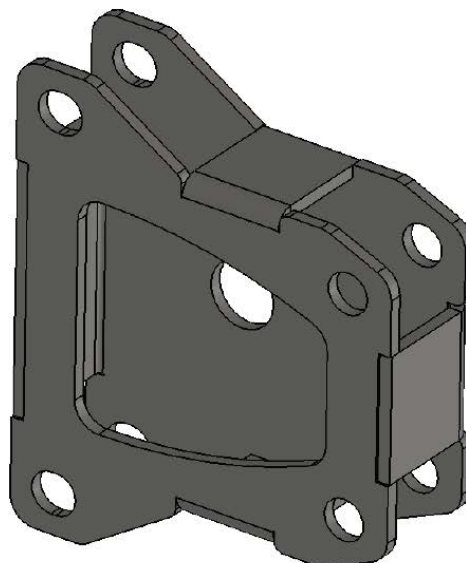
Dimensions in inch (mm)

Rayzr Joining Adapter

- Unit Weight: 0.44 lb. (0,2 kg)
- Maximum vertical length for joined Rayzrs is 5 meters

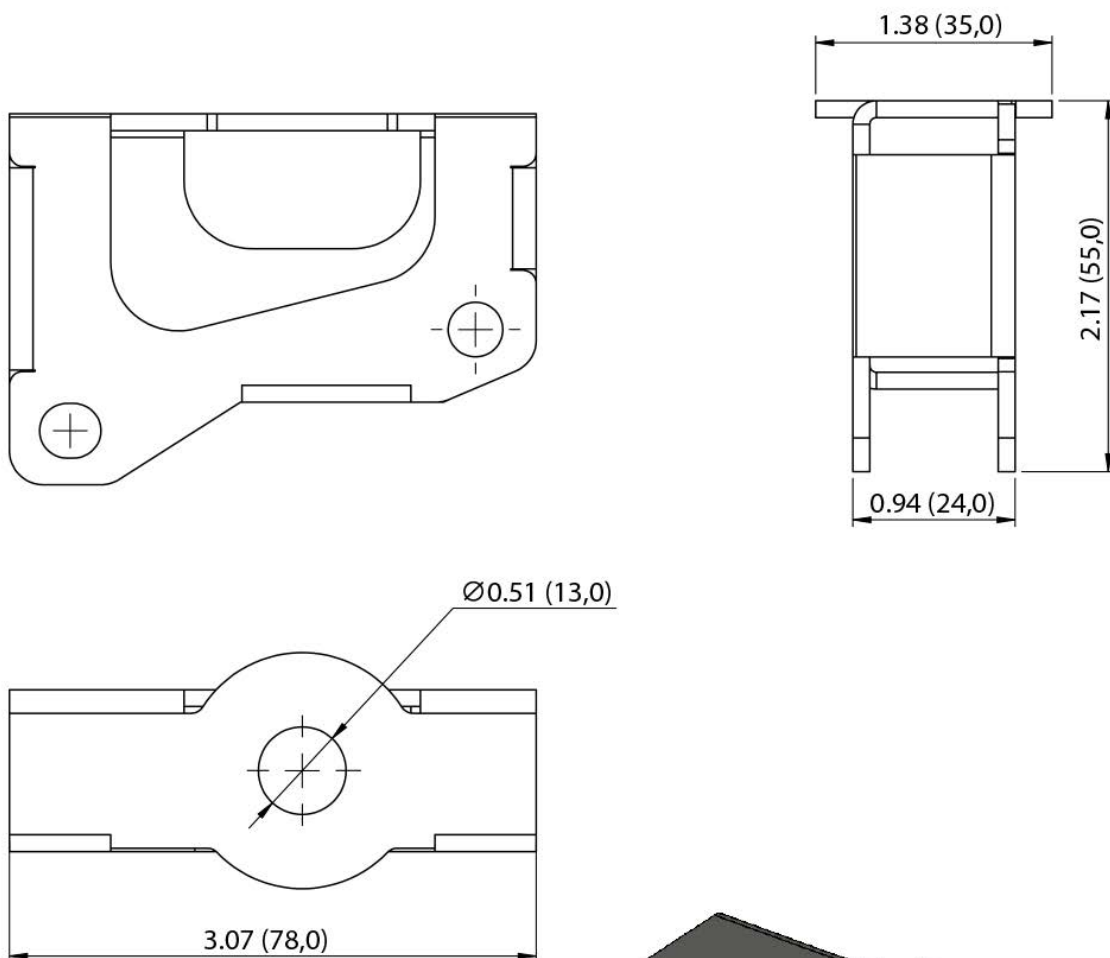


Solaris Flare Q+ Rayzr Joining Adapter
(FQRZJA)

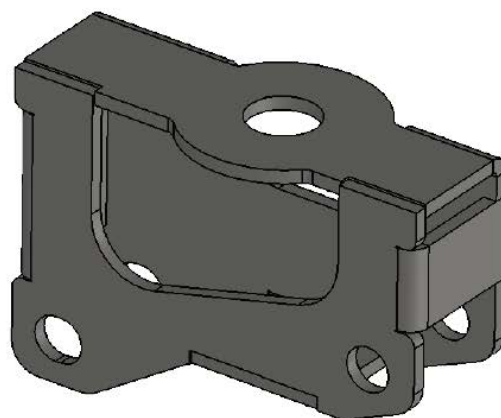


Rayzr Hanging Adapter

- Unit Weight: 0.57 lb. (0,26 kg)

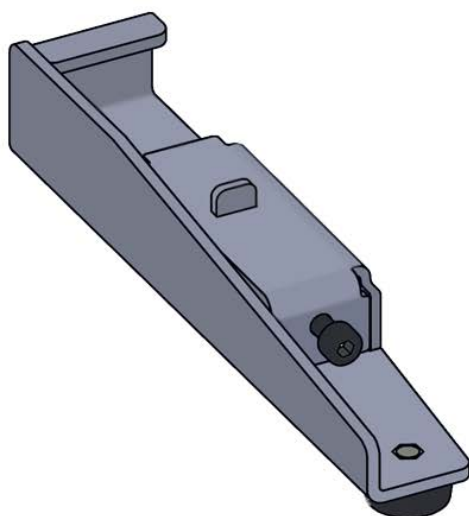
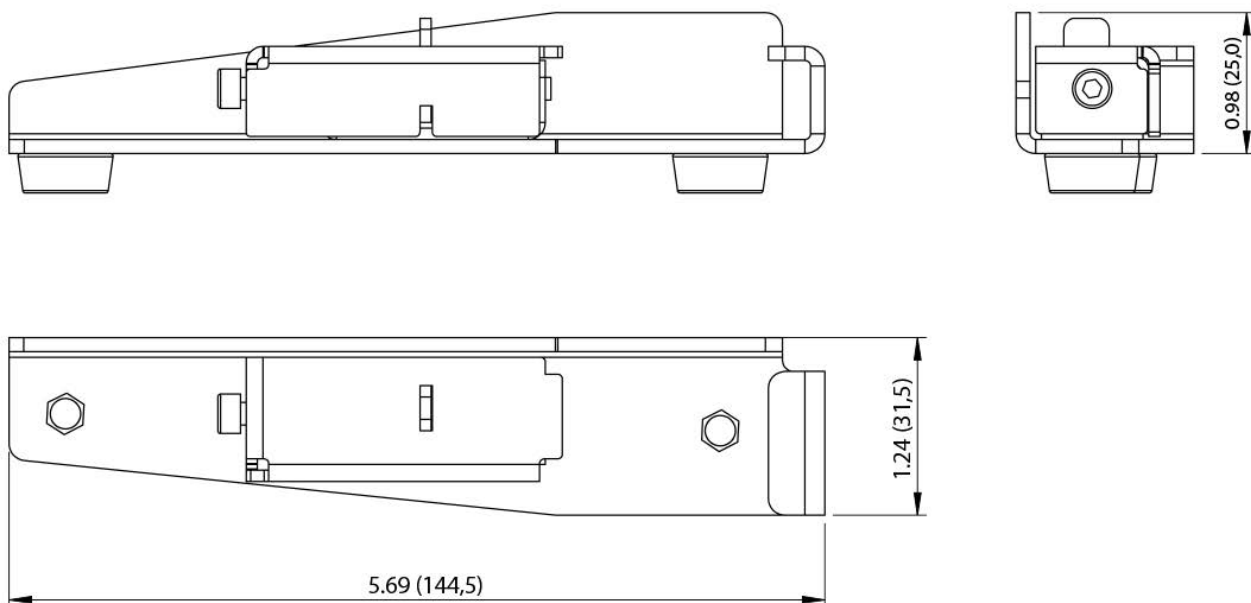


Solaris Flare Q+ Rayzr Hanging Adapter
(SOLFQRZHA)

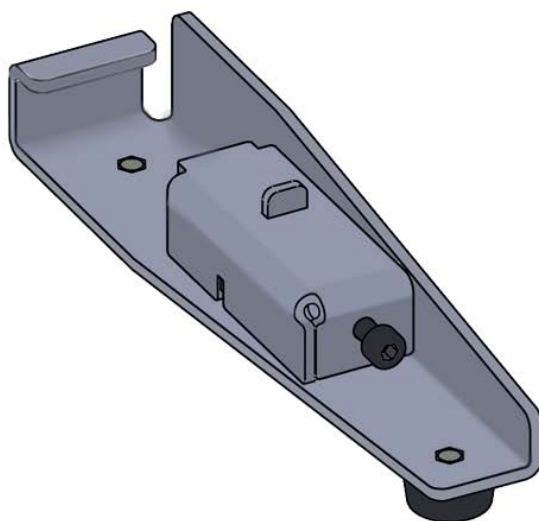


Rayzr Attachable Feet

- Unit Weight: 0.88 lb. (0,4 kg) per set



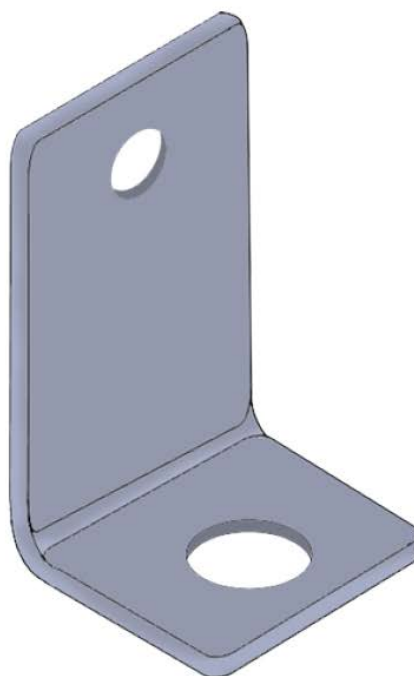
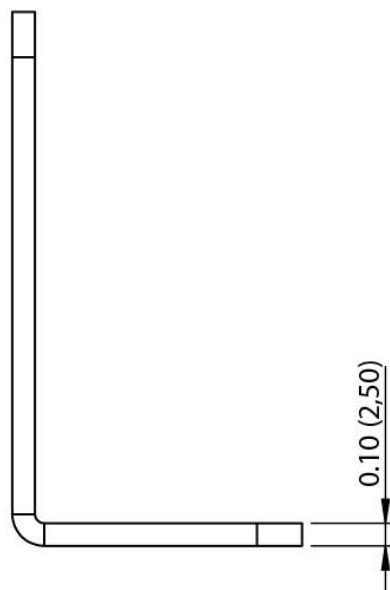
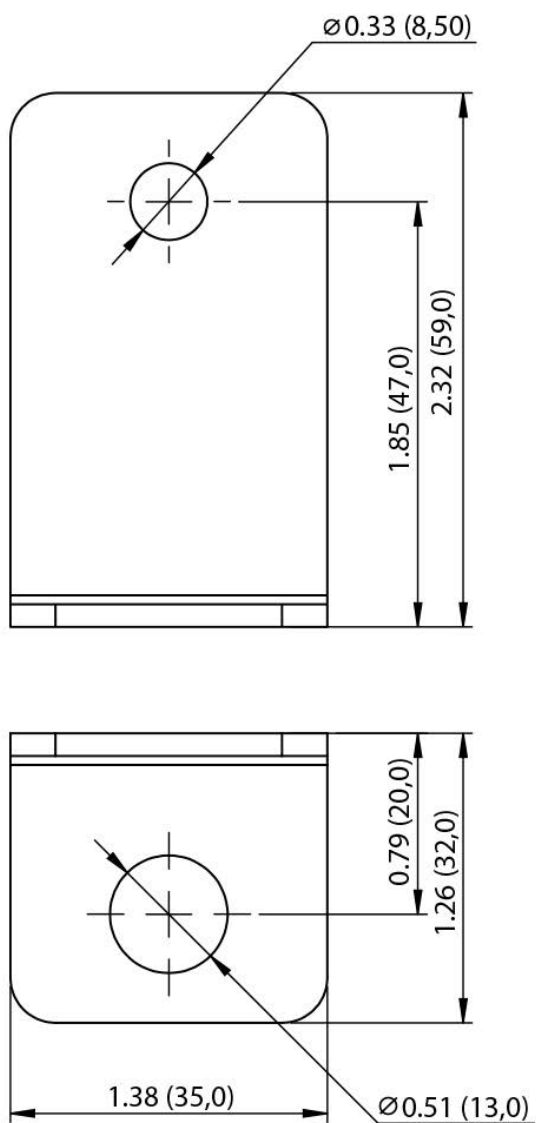
Solaris Flare Q+ Rayzr
Attachable Feet LEFT (SOLFQRZAFL)



Solaris Flare Q+ Rayzr
Attachable Feet RIGHT (SOLFQRZAFR)

Rayzr Scenery Mount

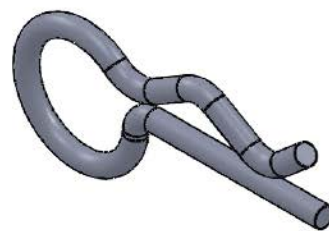
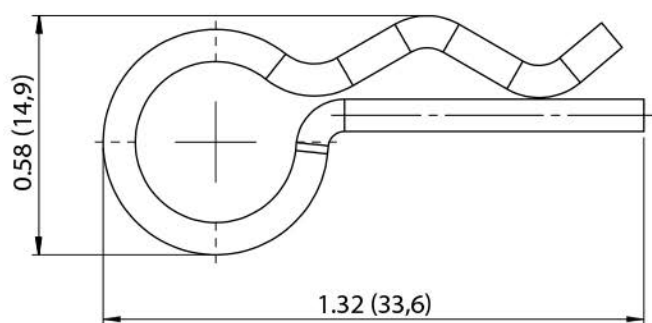
- Unit Weight: 0.11 lb. (0,05 kg)



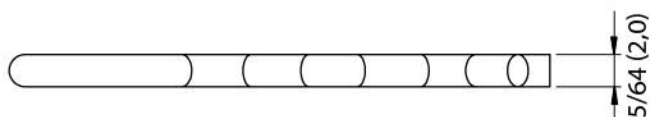
Solaris Flare Q+ Rayzr Scenery Mount
(FQZSM)

Rayzr Locking Clip

- Unit Weight: 0.02 lb. (0,01 kg)

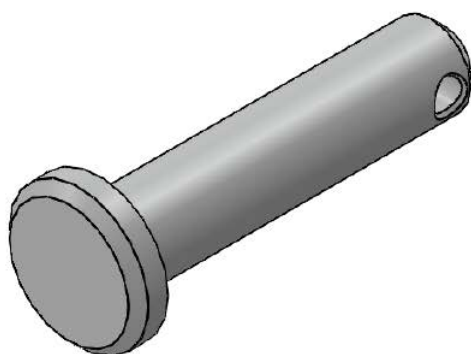
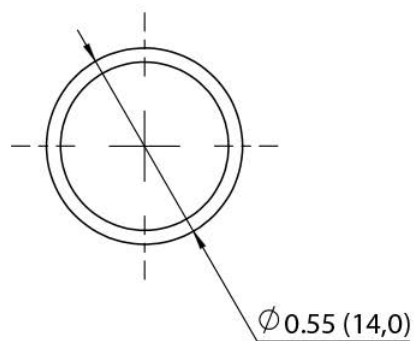
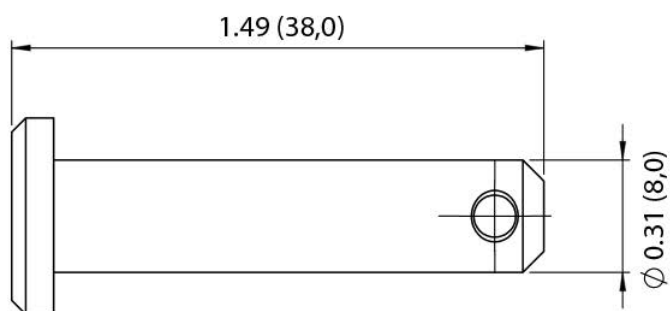


Solaris Flare Q+ Rayzr Locking Clip
(SOLFQRZLC)



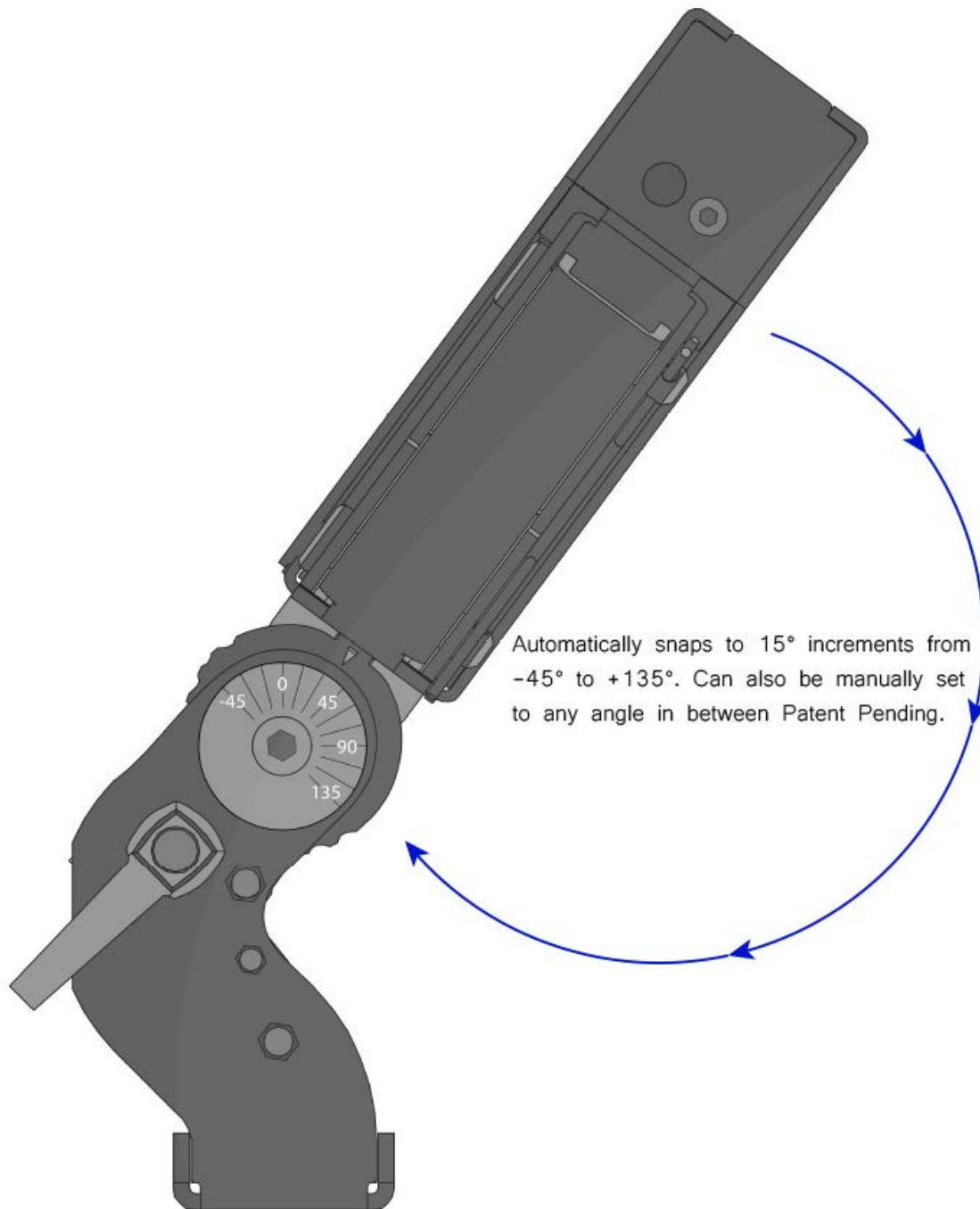
Rayzr Locking Pin

- Unit Weight: 0.08 lb. (0,04 kg)



Solaris Flare Q+ Rayzr Locking Pin
(SOLFQRZLP)

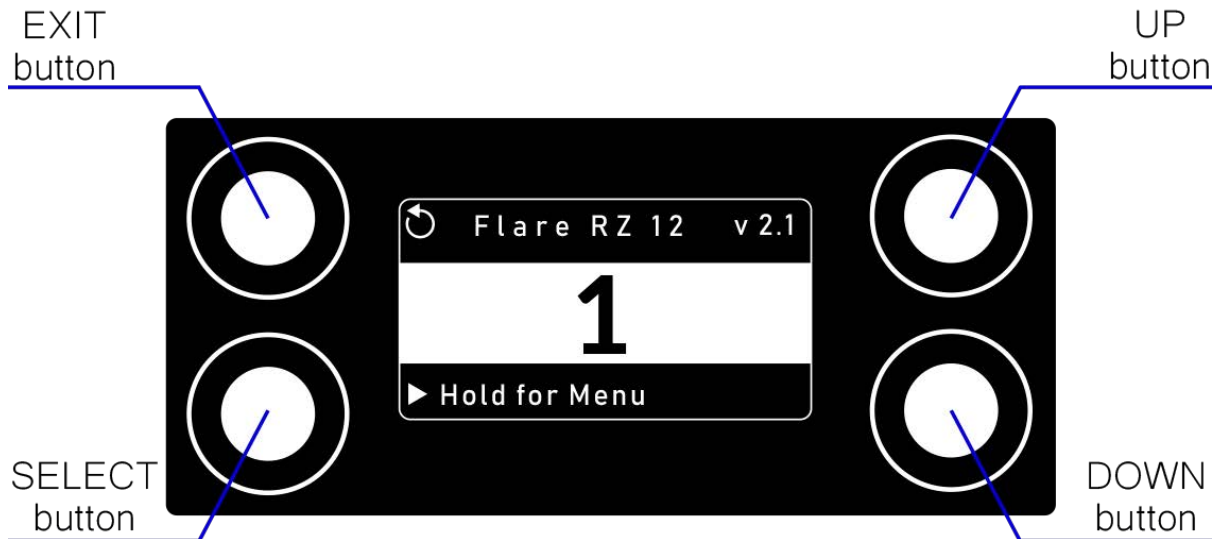
PreSet Yoke™ included with fixture



Operating Instructions

Control Panel Navigation

Access control panel functions using the four control panel buttons.



The Control Panel LCD Display shows the menu items selected from the menu map (see pages 16- 17). When a menu function is selected, the display will show the first available option for the selected menu function. To select a menu item, press **<SELECT>**.

Press and hold the **<SELECT>** button to scroll through the top-level menu items. This is the top of the menu map. Use the **<UP>** and **<DOWN>** buttons, located to the right of the LCD screen, to navigate the menu map and menu options. Press the **<SELECT>** button to access the menu function currently displayed or to enable a menu option. To return to the top of the menu map or main screen without changing the value, press the **<EXIT>** button.

Main Menu Functions

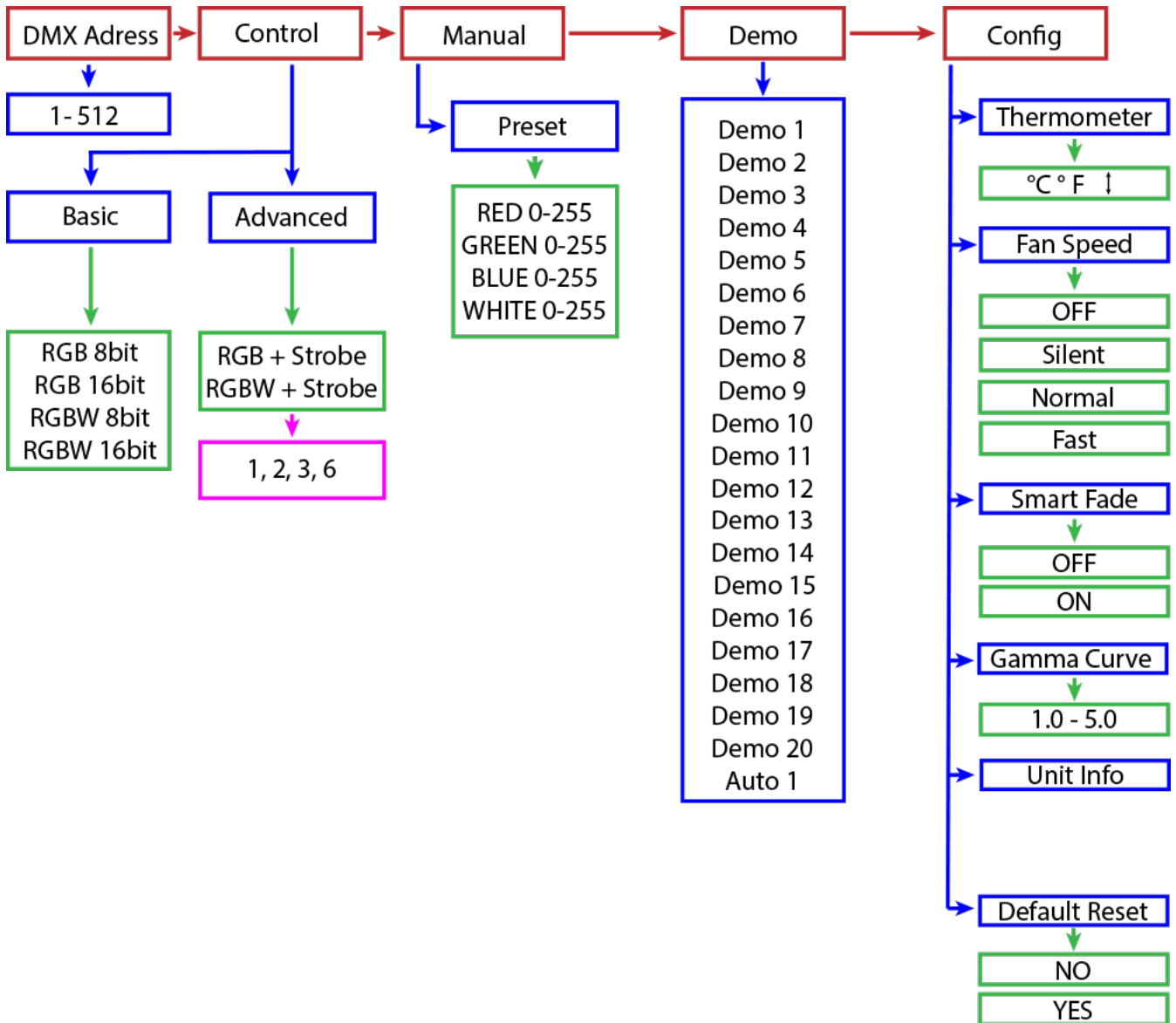
DMX Address – DMX address selection

Control – Control mode selection menu

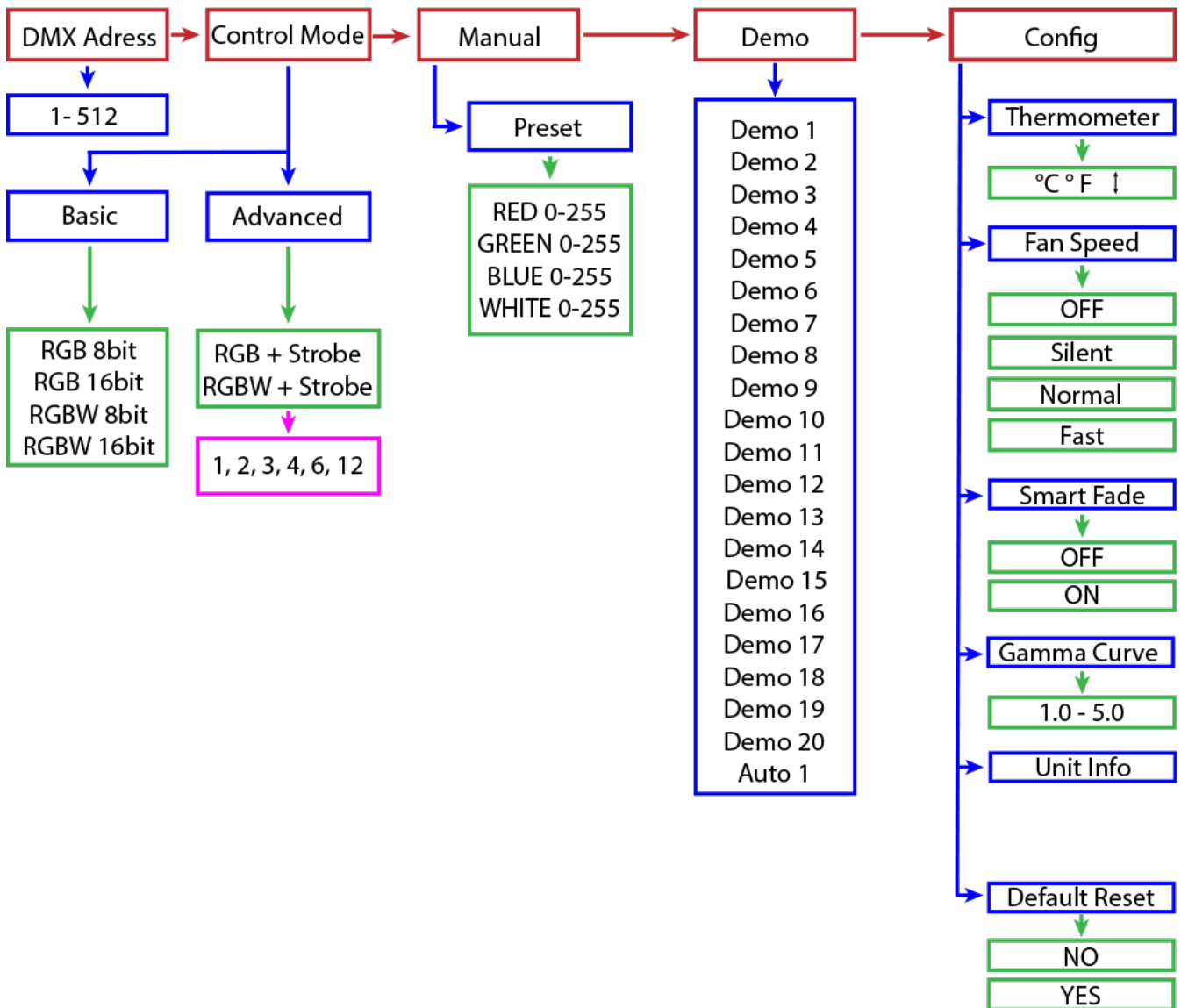
Manual – Manual Control **Demo** – Demonstration scenes **Config** – Configuration Menu

During normal operation, the Control Panel LED Display indicates DMX start address. When the DMX signal is not connected, or if the Flare is not receiving a DMX signal, the address blinks.

Menu Map – Rayzr Q+ 50 cm



Menu Map – Rayzr Q+ 100 cm



Menu Function Description

DMX Address – To set the required DMX address, open the Main Menu:

- 1) Press and hold **<SELECT>** button to open the **Main Menu**.



- 2) Use **<UP>** and **<DOWN>** buttons to find the **DMX address** function.
- 3) Press **<SELECT>** button to access the DMX address value change submenu.



- 4) Use **<UP>** and **<DOWN>** buttons to set necessary DMX address value.
- 5) Use **<SELECT>** button to confirm the new DMX address.
- 6) Main Menu will appear. Press **<EXIT>** button to return fixture at work-state.

Rotate display
button



7) The work-state control panel display shows current DMX address (e.g. 16).

– Flare fixtures are two fixtures in one (strobe and a wash/blinder). In each of the control modes, the fixture occupies varying numbers of DMX channels and has different control channels. To enter the Control submenu, follow these steps:

- 1) Press and hold <SELECT> button to open the **Main Menu**.
- 2) Use <UP> and <DOWN> buttons to find the **Control** submenu.
- 3) Press <SELECT> button to access the Control submenu.
- 4) Choose the correct Control Mode type.



Basic – This mode allows for simple control of the fixture as a Blinder/Wash fixture or as a Strobe.

Advanced – This mode allows for independent control of Blinder/Wash functions and the Strobe functions. This mode also allows for independent color and intensity control of every segment of LEDs independently.



Basic Mode

In Basic Mode, the fixture can be used as a wash/blinder, generic strobe, or color strobe. The first modes are the RGB and RGBW modes in 8-bit resolution or 16-bit resolution.

The RGB modes are designed to automatically adjust the white LEDs according to the RGB mix coming from the lighting controller.

The RGBW modes are designed to give independent control of all 4 colors.

8-bit control uses one DMX channel for each color, and 16-bit control allows for two DMX channels of control to give the lighting controller more steps of dimming.

Mode	Channel	DMX values	Preset	Function
RGB 8bit	1	0 - 255	0 - 100	Red Intensity
	2	0 - 255	0 - 100	Green Intensity
	3	0 - 255	0 - 100	Blue Intensity
RGB 16bit	1	0 - 255	0 - 100	Red Intensity HI Byte
	2	0 - 255	0 - 100	Red Intensity LOW Byte
	3	0 - 255	0 - 100	Green Intensity HI Byte
	4	0 - 255	0 - 100	Green Intensity LOW Byte
	5	0 - 255	0 - 100	Blue Intensity HI Byte
	6	0 - 255	0 - 100	Blue Intensity LOW Byte

Mode	Channel	DMX values	Preset	Function
RGBW 8bit	1	0 - 255	0 - 100	Red Intensity
	2	0 - 255	0 - 100	Green Intensity
	3	0 - 255	0 - 100	Blue Intensity
	4	0 - 255	0 - 100	White Intensity
RGBW 16bit	1	0 - 255	0 - 100	Red Intensity HI Byte
	2	0 - 255	0 - 100	Red Intensity LOW Byte
	3	0 - 255	0 - 100	Green Intensity HI Byte
	4	0 - 255	0 - 100	Green Intensity LOW Byte
	5	0 - 255	0 - 100	Blue Intensity HI Byte
	6	0 - 255	0 - 100	Blue Intensity LOW Byte
	7	0 - 255	0 - 100	White Intensity HI Byte
	8	0 - 255	0 - 100	White Intensity LOW Byte

Strobe Modes

Four channels control the functions of the strobe parameter: Strobe Intensity, Strobe Duration, Strobe Rate, and Strobe FX.

There are many effects that also use the strobe rate and duration controls to affect the effect's look. Please experiment to find the right duration and rate for your application.

Flash intensity		
0 - 5	0 - 2	Blackout
6 - 255	3 - 100	Intensity level
Flash duration		
0 - 254	0 - 99	0 - 650ms (50Hz AC)
255	100	HYPER
Flash rate		
0 - 5	0 - 2	No flash
6 - 255	3 - 100	0.5 - 25Hz (50Hz AC); 0.6 - 30Hz (60Hz AC)
Flash effects		
0 - 4	0 - 2	No effect
5	3	Wash Override (only available in RGB Strobe and RGBW Strobe modes) ¹
6 - 42	4 - 16	Ramp up
43 - 85	17 - 33	Ramp down
86 - 128	34 - 50	Ramp up - down
129 - 171	51 - 67	Random
172 - 214	68 - 84	Lighting
215 - 240	85 - 92	Spikes
241 - 245	93 - 95	Burst (use Rate at full)
246 - 250	96 - 98	"Meltdown" Random Pixels w/ Solid Background
251 - 255	99 - 100	"Meltdown" Random Pixels w/ Burst Background

Notes:

- 1) In RGB Strobe and RGBW Strobe modes, a feature in the Strobe FX channel allows the Flare to become a temporary wash/blinder fixture. If the Strobe FX channel is set to DMX value 5, the Strobe color channels become strobe wash/blinder color channels.

For example, the Flare can be strobing in White, and then quickly changed to a Blue Wash fixture.

- a) White strobing: Strobe Color Channels @ DMX 255, Strobing channels as desired.
- b) Blue Wash: Strobe Color channels to Blue-only @ DMX 255; Strobe FX @ DMX 5; the other strobe channels are ignored.

- 2) When burst is activated, use the rate channel at FULL to access a hyper-speed strobe
- 3) When Meltdown with Solid background is active, the Strobe Color determines the random pixel color, and the background color is determined by the pixel colors after the strobe FX channels. There is no background color when in RGB Strobe and RGBW Strobe mode. The background pixels are solid-on in this mode. The foreground strobe is randomized, not achievable in any other mode, and is difficult to reproduce with most DMX controllers at this rate.
- 4) When Meltdown with Burst background is active, the Strobe Color determines the random pixel color, and the background color is determined by the pixel colors after the strobe fx channels. There is no background color when in RGB Strobe and RGBW Strobe mode. The background pixels run at burst speed in this mode. The foreground strobe is randomized which is not achievable in any other mode and is difficult to reproduce with most DMX controllers at this rate.

Strobe Only Mode	1	0 - 255	0 - 100	Strobe Intensity
	2	0 - 255	0 - 100	Strobe Duration
	3	0 - 255	0 - 100	Strobe Rate
	4	0 - 255	0 - 100	Strobe FX

RGB and RGBW Strobe Modes

Mode	Channel	DMX values	Percent	Function
RGB Strobe	1	0 - 255	0 - 100	Red Strobe Intensity
	2	0 - 255	0 - 100	Green Strobe Intensity
	3	0 - 255	0 - 100	Blue Strobe Intensity
	4	0 - 255	0 - 100	Strobe Intensity
	5	0 - 255	0 - 100	Strobe Duration
	6	0 - 255	0 - 100	Strobe Rate
	7	0 - 255	0 - 100	Strobe FX
RGBW Strobe	1	0 - 255	0 - 100	Red Strobe Intensity
	2	0 - 255	0 - 100	Green Strobe Intensity
	3	0 - 255	0 - 100	Blue Strobe Intensity
	4	0 - 255	0 - 100	White Strobe Intensity
	5	0 - 255	0 - 100	Strobe Intensity
	6	0 - 255	0 - 100	Strobe Duration
	7	0 - 255	0 - 100	Strobe Rate
	8	0 - 255	0 - 100	Strobe FX

Note: In RGB Strobe and RGBW Strobe mode, there is also a feature in the Strobe FX channel that allows the Flare to become a temporary wash/blinder fixture. If you set the Strobe FX channel to DMX value 5, the Strobe color channels become strobe wash/blinder color and Strobe Intensity is used as a master intensity channel.

For example, you can be strobing in White, and then quickly change the fixture into a Blue Wash fixture.

White strobing: Strobe Color Channels @ DMX 255, Strobing channels as desired.

Blue Wash, Strobe Color channels to Blue-only @ DMX 255, Strobe Intensity at 255, Strobe FX @ DMX 5, the other strobe channels are ignored.

Advanced Modes

This control submenu setup is for advanced users allowing control of both Strobe Color and Strobe Intensity/Duration/Rate/FX independently of Wash/Blinder background color. This also allows independent control of individual segments (pixels)

RGB or RGBW control can be selected, plus the desired pixel segments.

The LED segments are comprised of 36 (Rayzr 100) or 18 (Rayzr 50) LEDs. In total, there are 12 controllable segments of 3 LEDs per pixel in Rayzr 100 cm or 6 controllable segments of 3 LEDs per pixel in Rayzr 50 cm. The more segments chosen, the more sets of RGB or RGBW will follow the Strobe Color and Strobe Control channels.

Choose how many sections (PIXELS) of control after choosing color mode (RGB or RGBW).



Pixel Locations

Solaris Flare Q+ Rayzr 50 cm

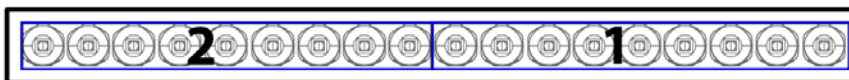
Flare Q+ Rayzr 50 cm consists of 18 10W Cree LEDs which are in six 3x1 pixel groups and may be controlled as a wash with 1, 2, 3 or 6-pixel modes.

Note: Only the entire fixture can be Strobed. Operators can chase individual sections with intensity or color very quickly to simulate strobing of individual segments. However, Strobe functions and Strobe color can only be set for the whole fixture.

1 pixel



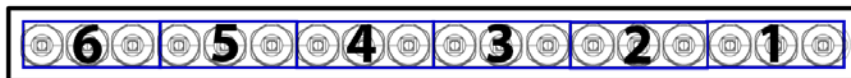
2 pixels



3 pixels



6 pixels



Solaris Flare Q+ Rayzr 100 cm

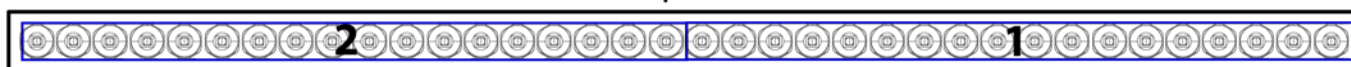
Flare Q+ Rayzr 100 cm consists of 36 10W Cree LEDs which are in twelve 3x1 pixel groups and may be controlled as a wash with 1, 2, 3, 4, 6, or 12-pixel modes.

Note: Only the entire fixture can be Strobed. Operators can chase individual sections with intensity or color very quickly to simulate strobing of individual segments. However, Strobe functions and Strobe color can only be set for the whole fixture.

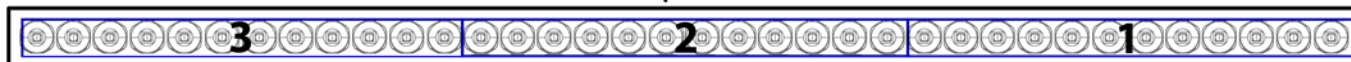
1 pixel



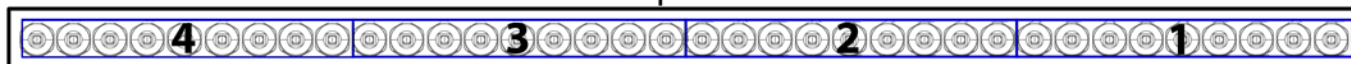
2 pixels



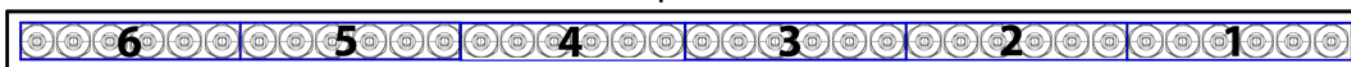
3 pixels



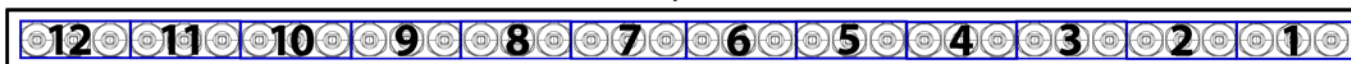
4 pixels



6 pixels



12 pixels



Advanced RGB Strobe DMX Channels

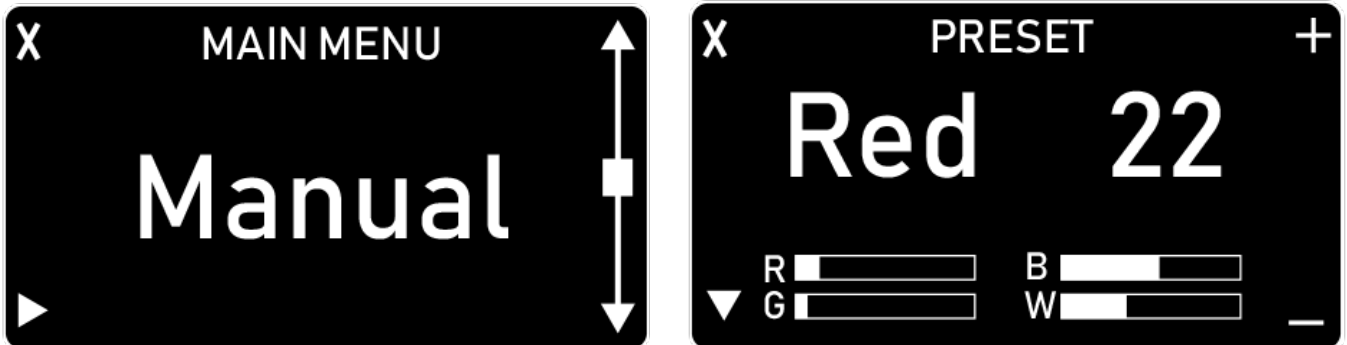
Flare Q+ Rayzr 100					Flare Q+ Rayzr 50	
PIXEL MODE	CHANNEL	DMX VALUE	PERCENT	FUNCTION	PIXEL MODE	FUNCTION
RGB PIXEL MODE 1	1	0 - 255	0 - 100	Red Strobe Intensity	RGB PIXEL MODE 1	Red Strobe Intensity
	2	0 - 255	0 - 100	Green Strobe Intensity		Green Strobe Intensity
	3	0 - 255	0 - 100	Blue Strobe Intensity		Blue Strobe Intensity
	4	0 - 255	0 - 100	Strobe Intensity		Strobe Intensity
	5	0 - 255	0 - 100	Strobe Duration		Strobe Duration
	6	0 - 255	0 - 100	Strobe Rate		Strobe Rate
	7	0 - 255	0 - 100	Strobe FX		Strobe FX
	8	0 - 255	0 - 100	1 pix Red intensity		1 pix Red intensity
	9	0 - 255	0 - 100	1 pix Green intensity		1 pix Green intensity
	10	0 - 255	0 - 100	1 pix Blue intensity		1 pix Blue intensity
RGB PIXEL MODE 2	11	0 - 255	0 - 100	2 pix Red intensity	RGB PIXEL MODE 2	2 pix Red intensity
	12	0 - 255	0 - 100	2 pix Green intensity		2 pix Green intensity
	13	0 - 255	0 - 100	2 pix Blue intensity		2 pix Blue intensity
RGB PIXEL MODE 3	14	0 - 255	0 - 100	3 pix Red intensity	RGB PIXEL MODE 3	3 pix Red intensity
	15	0 - 255	0 - 100	3 pix Green intensity		3 pix Green intensity
	16	0 - 255	0 - 100	3 pix Blue intensity		3 pix Blue intensity
RGB PIXEL MODE 4	17	0 - 255	0 - 100	4 pix Red intensity	RGB PIXEL MODE 6	4 pix Red intensity
	18	0 - 255	0 - 100	4 pix Green intensity		4 pix Green intensity
	19	0 - 255	0 - 100	4 pix Blue intensity		4 pix Blue intensity
RGB PIXEL MODE 6	20	0 - 255	0 - 100	5 pix Red intensity		5 pix Red intensity
	21	0 - 255	0 - 100	5 pix Green intensity		5 pix Green intensity
	22	0 - 255	0 - 100	5 pix Blue intensity		5 pix Blue intensity
	23	0 - 255	0 - 100	6 pix Red intensity		6 pix Red intensity
	24	0 - 255	0 - 100	6 pix Green intensity		6 pix Green intensity
	25	0 - 255	0 - 100	6 pix Blue intensity		6 pix Blue intensity
RGB PIXEL MODE 12	26	0 - 255	0 - 100	7 pix Red intensity		
	27	0 - 255	0 - 100	7 pix Green intensity		
	28	0 - 255	0 - 100	7 pix Blue intensity		
	29	0 - 255	0 - 100	8 pix Red intensity		
	30	0 - 255	0 - 100	8 pix Green intensity		
	31	0 - 255	0 - 100	8 pix Blue intensity		
	32	0 - 255	0 - 100	9 pix Red intensity		
	33	0 - 255	0 - 100	9 pix Green intensity		
	34	0 - 255	0 - 100	9 pix Blue intensity		
	35	0 - 255	0 - 100	10 pix Red intensity		
	36	0 - 255	0 - 100	10 pix Green intensity		
	37	0 - 255	0 - 100	10 pix Blue intensity		
	38	0 - 255	0 - 100	11 pix Red intensity		
	39	0 - 255	0 - 100	11 pix Green intensity		
	40	0 - 255	0 - 100	11 pix Blue intensity		
	41	0 - 255	0 - 100	12 pix Red intensity		
	42	0 - 255	0 - 100	12 pix Green intensity		
	43	0 - 255	0 - 100	12 pix Blue intensity		

Advanced RGBW Strobe DMX Channels

Flare Q+ Rayzr 100					Flare Q+ Rayzr 50	
PIXEL MODE	CHANNEL	DMX VALUE	PERCENT	FUNCTION	PIXEL MODE	FUNCTION
RGBW PIXEL MODE 1	1	0 - 255	0 - 100	Red Strobe Intensity	RGBW PIXEL MODE 1	Red Strobe Intensity
	2	0 - 255	0 - 100	Green Strobe Intensity		Green Strobe Intensity
	3	0 - 255	0 - 100	Blue Strobe Intensity		Blue Strobe Intensity
	4	0 - 255	0 - 100	White Strobe Intensity		White Strobe Intensity
	5	0 - 255	0 - 100	Strobe Intensity		Strobe Intensity
	6	0 - 255	0 - 100	Strobe Duration		Strobe Duration
	7	0 - 255	0 - 100	Strobe Rate		Strobe Rate
	8	0 - 255	0 - 100	Strobe FX		Strobe FX
	9	0 - 255	0 - 100	1 pix Red intensity		1 pix Red intensity
	10	0 - 255	0 - 100	1 pix Green intensity		1 pix Green intensity
	11	0 - 255	0 - 100	1 pix Blue intensity		1 pix Blue intensity
	12	0 - 255	0 - 100	1 pix White intensity		1 pix White intensity
RGBW PIXEL MODE 2	13	0 - 255	0 - 100	2 pix Red intensity	RGBW PIXEL MODE 2	2 pix Red intensity
	14	0 - 255	0 - 100	2 pix Green intensity		2 pix Green intensity
	15	0 - 255	0 - 100	2 pix Blue intensity		2 pix Blue intensity
	16	0 - 255	0 - 100	2 pix White intensity		2 pix White intensity
RGBW PIXEL MODE 3	17	0 - 255	0 - 100	3 pix Red intensity	RGBW PIXEL MODE 3	3 pix Red intensity
	18	0 - 255	0 - 100	3 pix Green intensity		3 pix Green intensity
	19	0 - 255	0 - 100	3 pix Blue intensity		3 pix Blue intensity
	20	0 - 255	0 - 100	3 pix White intensity		3 pix White intensity
RGBW PIXEL MODE 4	21	0 - 255	0 - 100	4 pix Red intensity	RGBW PIXEL MODE 6	4 pix Red intensity
	22	0 - 255	0 - 100	4 pix Green intensity		4 pix Green intensity
	23	0 - 255	0 - 100	4 pix Blue intensity		4 pix Blue intensity
	24	0 - 255	0 - 100	4 pix White intensity		4 pix White intensity
RGBW PIXEL MODE 6	25	0 - 255	0 - 100	5 pix Red intensity		5 pix Red intensity
	26	0 - 255	0 - 100	5 pix Green intensity		5 pix Green intensity
	27	0 - 255	0 - 100	5 pix Blue intensity		5 pix Blue intensity
	28	0 - 255	0 - 100	5 pix White intensity		5 pix White intensity
	29	0 - 255	0 - 100	6 pix Red intensity		6 pix Red intensity
	30	0 - 255	0 - 100	6 pix Green intensity		6 pix Green intensity
	31	0 - 255	0 - 100	6 pix Blue intensity		6 pix Blue intensity
	32	0 - 255	0 - 100	6 pix White intensity		6 pix White intensity
RGBW PIXEL MODE 12	33	0 - 255	0 - 100	7 pix Red intensity		
	34	0 - 255	0 - 100	7 pix Green intensity		
	35	0 - 255	0 - 100	7 pix Blue intensity		
	36	0 - 255	0 - 100	7 pix White intensity		
	37	0 - 255	0 - 100	8 pix Red intensity		
	38	0 - 255	0 - 100	8 pix Green intensity		
	39	0 - 255	0 - 100	8 pix Blue intensity		
	40	0 - 255	0 - 100	8 pix White intensity		
	41	0 - 255	0 - 100	9 pix Red intensity		
	42	0 - 255	0 - 100	9 pix Green intensity		
	43	0 - 255	0 - 100	9 pix Blue intensity		
	44	0 - 255	0 - 100	9 pix White intensity		
	45	0 - 255	0 - 100	10 pix Red intensity		
	46	0 - 255	0 - 100	10 pix Green intensity		
	47	0 - 255	0 - 100	10 pix Blue intensity		
	48	0 - 255	0 - 100	10 pix White intensity		
	49	0 - 255	0 - 100	11 pix Red intensity		
	50	0 - 255	0 - 100	11 pix Green intensity		
	51	0 - 255	0 - 100	11 pix Blue intensity		
	52	0 - 255	0 - 100	11 pix White intensity		
	53	0 - 255	0 - 100	12 pix Red intensity		
	54	0 - 255	0 - 100	12 pix Green intensity		
	55	0 - 255	0 - 100	12 pix Blue intensity		
	56	0 - 255	0 - 100	12 pix White intensity		

Manual Function

This menu function allows the user to mix color from all 4 RGBW channels manually and independently without a DMX console. Manual Function is as a stand-alone mode. Manual values are saved if power is shut down. A reset will clear these values (see Menu Maps pages 16- 17)



Demo

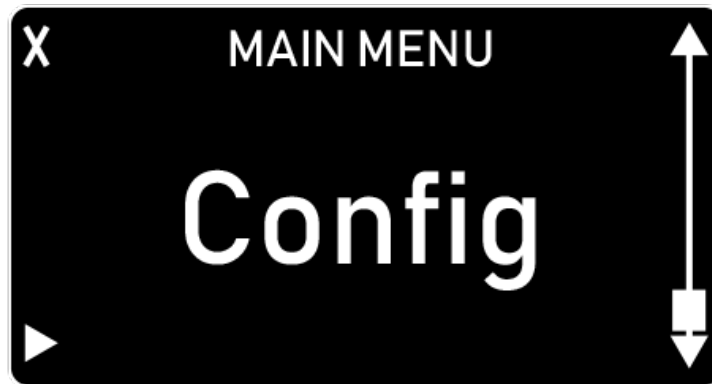
In this menu (1-21) demonstration scenes may be selected:



During the demo functions, using the <UP> and <DOWN> buttons will change the demo scenes. To exit **Demo** mode, press the <EXIT > button. This mode works as a stand-alone mode. Even if the Flare is turned off, and then back on, the selected demo scene will be saved. While in the Demo menu, the demonstration scene will play. When exited from Demo mode, the Flare will return to a normal state of operation.

Config

Configuration setup. In this menu the following functions may be selected



Thermometer – Internal temperature gauge:

The built-in thermometer tracks internal operating temperature. Pressing the **<UP>** and **<DOWN>** buttons selects degrees Celsius or Fahrenheit.

Fan Speed – Cooling Fan:

OFF- Cooling Fan is switched off.

SILENT- Reduced power and fan noise.

AUTO – Fan speed is automatically controlled by the Flare and will adjust according to temperatures at normal operating levels.

FAST – Full Power, full fans when needed

Smart Fade – The Flare will attempt to add smoothness to crossfading DMX values coming from the lighting controller but will also allow for very quick change of values where smoothness is not applicable.

ON- Smart Fade is turned On

OFF- Smart Fade is turned Off

Gamma Curve – Gamma correction curve selection. This sets direct relation between AC current to the LEDs and the DMX value. The lower the value, the dimming curve and steps of intensity will be more noticeable at the bottom of the DMX range. The higher the value, the smoother the bottom end of the curve will be where the human eye detects more subtle changes.

Unit info- This selection shows devices software version and release date, as well as useful real-time information, such as fan speed and temperature of the fixture, driver version, errors and temperature on each chip.

Reset – Set factory defaults. Two options: **NO** and **YES**. Use the **<UP>** and **<DOWN>** buttons to change these values.

FLARE v8.9 and FLARE RDM v9.73 LED Color Output Calibration

Recommended Calibration Scenario:

- Get a group of ~10 fixtures close enough together to compare them and set to individual DMX addresses so they can be turned off and on independently from the DMX source.
- Change the fixtures' Control mode to Basic -> RGBW -> 8bit 4-channel mode for ease of control. Select one fixture as the benchmark – if there are visible differences in brightness, select one that is medium brightness.
- Enter calibration menu for all fixtures. Reset calibration values to +/- 0% and PURE color. Using a lux meter from distance of ~5-10m measure individual color (R, G, B, and W) brightness of benchmark fixture. Go through the rest of fixtures (one fixture and single color at a time) to match individual color brightness.
- After intensity matching has been done, turn on all fixtures to a desire mixed color and adjust color hue if necessary so all fixtures look alike. Color hue changes will likely be done using green and white colors (red and blue tend to be similar).
- After color hue has been matched, do a color intensity calibration again as changing color hue changes intensity as well. This must be done only for fixtures that had color hue changed. Test units by mixing different colors. They should look alike.
- *Save calibration values* – Keep the benchmark unit and swap out all calibrated units for the next group of un-calibrated units and repeat.

Visual calibration without a lux meter – Another method is to put white paper in front of the fixture and try matching visually. This isn't as effective as measuring individual color output in lux however. Follow the same procedure as above.

Appendix

RDM Functionality

Flare RDM, Flare Jr, Flare Q+, Flare Q+ LR and Flare Q+ Rayzr are equipped with RDM Functionality. Below are the RDM functions available in these devices. TMB has many options for RDM control of your devices: ProPlex RDMigo and IQ RDM Manager Software; ProPlex Striker; and ProPlex MasterFade. Additionally, ProPlex RDM Opto-Splitters and the ProPlex IQ product range offer many means of RDM over DMX data distribution.

Main	Display	Temperature	Sensor Count
Mode	Display invert	Present value	Present value
DMX address	Display level	Lowest value	Lowest value
RDM version		Highest value	Highest value
Software version			

General Maintenance

To maintain optimum performance and minimize wear fixtures should be cleaned frequently. Usage and environment are contributing factors in determining frequency. Generally, fixtures should be cleaned at least twice a month. Dust build up reduces light output performance and can cause overheating. This can lead to reduced lamp life and increased mechanical wear. Be sure to disconnect power to the fixture before conducting maintenance.

Unplug fixture from power. Use a vacuum or air compressor and a soft brush to remove collected dust from external vents and internal components. Clean all glass when the fixture is cold with a mild solution of glass cleaner or isopropyl alcohol and a soft lint free cotton cloth or lens tissue. Apply solution to the cloth or tissue and drag dirt and grime to the outside of the lens. Gently polish optical surfaces until they are free of haze and lint.

The cleaning of internal and external optical lenses and/or mirrors must be carried out periodically to optimize light output. Cleaning frequency depends on the environment in which the fixture operates: damp, smoky or particularly dirty surroundings can cause greater accumulation of dirt on the unit's optics. Clean with soft cloth using normal glass cleaning fluid. Always dry the parts carefully. Clean the external optics at least every 20 days. Clean the internal optics at least every 30 to 60 days.

Limited Warranty

Solaris fixtures are warranted by TMB against defective materials or workmanship for a period of two (2) years from the date of original sale by TMB.

TMB's warranty shall be restricted to the repair or replacement of any part that proves to be defective and for which a claim is submitted to TMB before the expiration of the applicable warranty periods.

This Limited Warranty is void if the defects of the Product are the result of:

- Opening the casing, repair, or adjustment by anyone other than TMB or persons specifically authorized by TMB
- Accident, physical abuse, mishandling, or misapplication of the product.
- Damage due to lightning, earthquake, flood, terrorism, war, or act of God.

TMB will not assume responsibility for any labor expended, or materials used, to replace and/or repair the Product without TMB's prior written authorization. Any repair of the Product in the field, and any associated labor charges, must be authorized in advance by TMB. Freight costs on warranty repairs are split 50/50: Customer pays to ship defective product to TMB; TMB pays to ship repaired product, ground freight, back to Customer.

This warranty does not cover consequential damages or costs of any kind.

A Return Merchandise Authorization (RMA) Number must be obtained from TMB prior to return of any defective merchandise for warranty or non-warranty repair. For all repairs please contact TMB Tech Support Repair using the contact information below or email TechSupportRepairNA@tmb.com.

US

527 Park Ave.
San Fernando, CA 91340
Tel: +1 818.899.8818
Fax: +1 818.899.8813
tmb-info@tmb.com
www.tmb.com

UK

21 Armstrong Way
Southall, UB2 4SD England
Tel: +44 (0)20.8574.9700
Fax: +44 (0)20.8574.9701
tmb-info@tmb.com
www.tmb.com

Return Procedure

Please send returned merchandise prepaid and in the original packing. Freight call tags will not be issued for shipping the product to TMB, but TMB will pay the freight for return to the customer. Clearly label package with a Return Merchandise Authorization Number (RMA #). Products returned without an RMA # will delay service. Please contact TMB and request an RMA # prior to shipping the unit. Be prepared to provide the model number, serial number, and a brief description of the cause for the return. Be sure to properly pack the unit; any shipping damage resulting from inadequate packaging is the customer's responsibility. TMB reserves the right to use its own discretion to repair or replace product(s). Proper UPS packing or double-boxing will better ensure product integrity when shipped.

Note: If you are given an RMA #, please include the following information on a piece of paper inside the box:

- 1) Your name
- 2) Your address
- 3) Your phone number
- 4) The RMA #
- 5) A brief description of the symptoms