SNOW

PROFESSIONAL LIGHTING

SnowSTAGE
Fresnel HEX 1

USER MANUAL



400 W RGBALC LED • IP66 • MOTORISED FRESNEL

Product overview

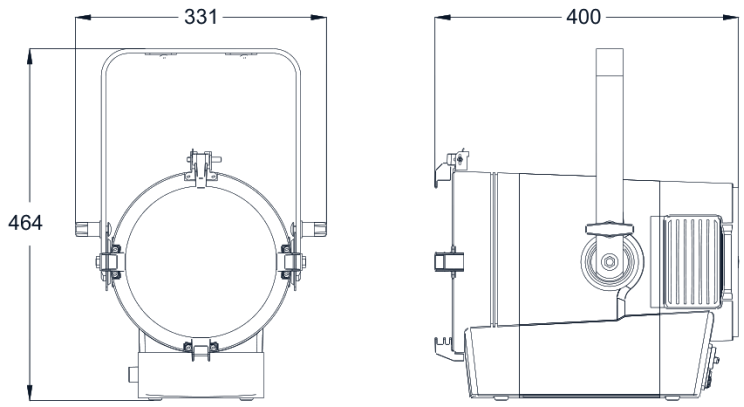
SnowSTAGE Fresnel HEX 1

Contents

Safety instructions	3	Signal and fixture information	8
Mounting and power	4	DMX channel maps	9
DMX wiring and firmware	5	DMX value reference	10
Display and menu reference	6	Preset colours	11
System settings	7		

Technical specifications

Parameter	Specification
Light source	400 W RGBALC LED (red, green, blue, amber, lime, cyan)
Motorised zoom	15°–83° overall
Beam angle	15°–50°
Field angle	22°–83°
CCT and colour rendering	1800–10,000 K; CRI (Ra) ≥95
Power supply / maximum draw	100–240 V AC, 50/60 Hz / 450 W
Ingress protection / ambient temperature	IP66 / −20 °C to +45 °C
Dimensions (H × W × D) / weight	464 × 331 × 400 mm / 10.3 kg (product data sheet)
DMX and service connections	3- or 5-pin XLR in/out, USB-C firmware port



Dimensions in mm

Check the fixture before planning an installation

The supplied technical manual lists 477 × 330 × 410 mm (H × W × D) and 11 kg. Confirm the actual dimensions and installed weight before specifying clearances, clamps or rigging.

Safety instructions

SnowSTAGE Fresnel HEX 1

Qualified personnel only

Have a qualified professional install and service this fixture. Follow these instructions and all applicable electrical and rigging requirements. Unauthorised modifications can compromise safety.

Electrical safety

- Verify that the supply matches the rating on the fixture. Always connect protective earth. The green/yellow conductor is protective earth.
- Keep hands dry when handling power cables. Inspect the fixture and cable regularly. Protect the cable from pinching and sharp edges.
- Disconnect the fixture from mains power when it is out of use and before cleaning, replacing a fuse or carrying out service. Electrical connection and repairs must be performed by qualified personnel.
- Use replacement fuses of the same type and rating. The light source may be replaced only by the manufacturer, its service agent or a similarly qualified person.

Heat and operating environment

- The housing can reach 70 °C (158 °F). Avoid contact during operation, keep the fixture away from accidental contact and allow at least 10 minutes of cooling before handling.
- Keep combustible materials such as fabric, paper and wood at least 500 mm from the fixture. The maximum ambient temperature is 45 °C (113 °F).
- Avoid repeated rapid power cycling. Protect the fixture from impact during transport and installation. Damage to the coating can lead to corrosion.

Mechanical safety

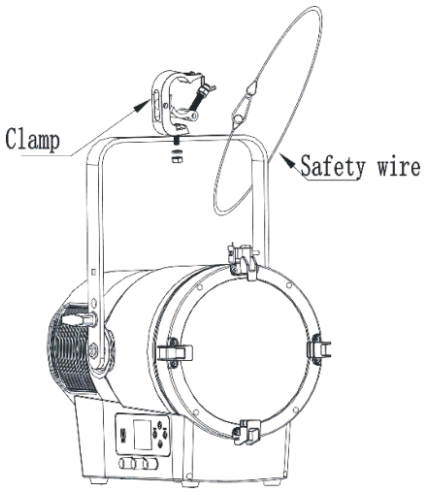
- Before use, check that the housing is closed securely and all screws are tight.
- For overhead use, secure the fixture with a rated secondary safety cable through the designated rear safety eye. Follow the mounting instructions on the next page.

Mounting and power

SnowSTAGE Fresnel HEX 1

Mounting and secondary suspension

- Verify that the supporting structure and mounting hardware can support at least 10 times the fixture weight.
- For overhead installation, fit a rated secondary safety cable capable of supporting at least 10 times the fixture weight. Pass it through the designated rear safety eye.
- Check the clamp, yoke and load-bearing structure before operating the fixture.



Clamp and rear safety cable

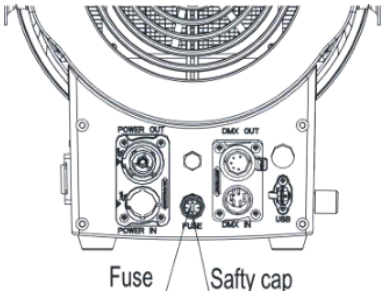
Mains connection and power linking

The fixture accepts 100–240 V AC at 50/60 Hz. When linking power, use a maximum of 2 fixtures at 110 V or 4 at 220 V. Observe the rating of the supply circuit, cables and connectors.

Connection	US wire	European wire	Terminal colour
AC live	Black	Brown	Yellow / brass
AC neutral	White	Blue	Silver
Protective earth	Green/yellow	Green/yellow	Green

Fuse replacement

- Disconnect mains power and allow the fixture to cool.
- Unscrew the fuse cap and remove the fuse.
- Install a fuse of the same type and rating.
- Reinstall the cap before reconnecting mains power.



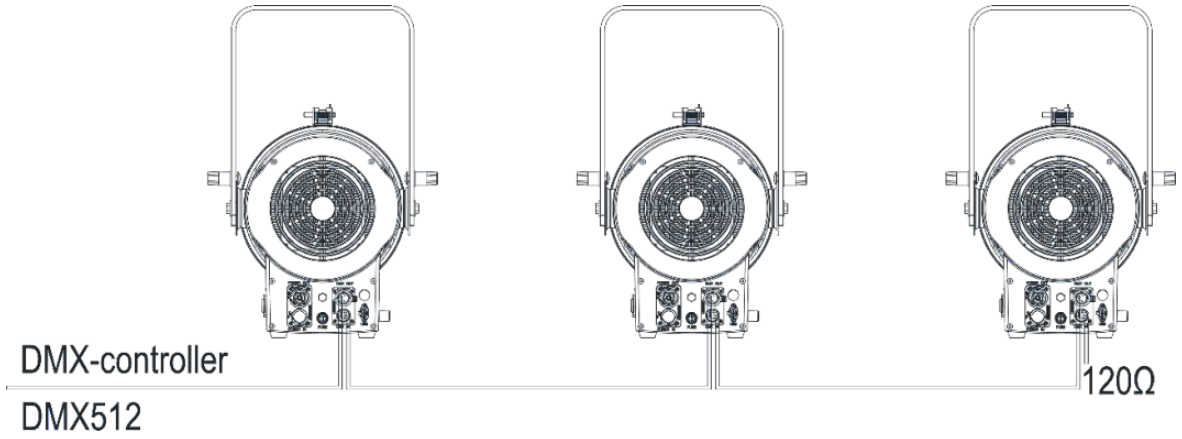
DMX wiring and firmware

SnowSTAGE Fresnel HEX 1

DMX512 network

- Connect the DMX controller to the first fixture's DMX input. Daisy-chain each fixture's output to the next fixture's input using DMX cable.
- Set a start address between 001 and 512. Allocate the full channel footprint of each fixture within the universe and avoid overlap. For example, with 20-channel TR16 fixtures, use addresses 001, 021 and 041.
- Fit a 120 Ω DMX terminator between Data − and Data + at the output of the last fixture in the chain.

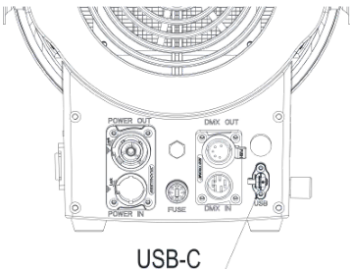
XLR pin	Assignment
1	Signal common / shield
2	Data −
3	Data +
4 and 5	Not connected (5-pin XLR)



DMX512 chain with a 120 Ω terminator on the last fixture

Firmware update via USB-C

- Insert a USB-C flash drive containing the firmware for this fixture.
- Open UPGRADE FIRMWARE on the display. The menu may show Upgrade Software.
- Select the matching firmware file and confirm.



Display and menus

SnowSTAGE Fresnel HEX 1

Control	Action
MENU	Open the menu or return to the previous level.
ENTER	Select an option, confirm a value or save the current setting.
UP / DOWN	Scroll through menu items and increase / decrease a value.

Knob assignments

KNOB MODE	Knob 1	Knob 2	Knob 3
Mode 1	Dimmer	Zoom	CCT
Mode 2	Dimmer	Zoom	Colour
Mode 3	Hue	Saturation	Intensity
Mode 4	Dimmer	CCT	Green

Main menu

Menu	Options	Values or function
STATIC	DIMMER; RED, GREEN, BLUE, AMBER, LIME, CYAN	0–255 per parameter
STATIC	CCT	NONE or one of the CCT presets listed on page 10
STATIC	PRESET COLOR	COLOR 1–48 (see the annex)
STATIC	STROBE / ZOOM	0–25 Hz / 0–255
ADDRESS	DMX start address	001–512 (default 001)
RUN MODE	DMX512 / SLAVE	DMX512 is the default. SLAVE selects master/slave operation.
PERSONALITY	HSIC / SSP / TOUR / TR16 / CMY	TR16 is the default.
AUTO PROGRAM	AUTO 1–10; PR 1 / PR 2	Auto speed 0–255. PR 1 and PR 2 play the custom programs.

System settings

SnowSTAGE Fresnel HEX 1

Edit custom programs

Path / option	Values
EDIT → PROGRAM 1–2 → SCENE 01–10	Edit scenes in either custom program. Select PR 1 or PR 2 in AUTO PROGRAM to play them.
DIMMER; RED, GREEN, BLUE, AMBER, LIME, CYAN	0–255 per parameter
CCT; PRESET COLOR; ZOOM; TIME; FADE	0–255 per parameter
STROBE	0–25
CLEAN EDIT1 / CLEAN EDIT2	YES / NO. Clears the edited scenes for the selected program.

Setting menu

Setting	Options	Function
RESET	RESET / WDMX HIDE	Restore factory settings. WDMX HIDE offers YES / NO.
UPLOAD	Password; YES / NO	Upload setting data.
DIMMER SPEED	HALOGEN (default) / LED	Slower response / faster response.
DIMMER CURVE	LINEAR / SQUARE LAW (default) / INV. SQUARE LAW / S-CURVE	Select the dimming curve.
TUNGSTEN FADE	ON / OFF (default)	Enable or disable tungsten fade.
DMX ERROR	SAVE (default) / BLACK / STATIC	Hold the last look, blackout or use the static look on DMX loss.
PWM RATE	1200 (default) / 2400 / 4000 / 6000 / 25000 / 40000 Hz	Select PWM frequency.
PERFORM	STUDIO / POWER / LIVE (default)	Low fan speed, high fan speed at full power, or automatic fan control.
DISP KEY	ON (default) / OFF	Enable or disable display key lock.
DISP TIME	ON / 30s (default) / 1min / 2min	ON keeps the backlight on. Other settings switch the backlight off after inactivity.

Menu password

Press UP, DOWN, UP, DOWN, then ENTER.

Signal and information

SnowSTAGE Fresnel HEX 1

Other settings

Setting	Options and function
COLOR CALI	OFF selects full-power operation. User Calibration adjusts red, green, blue, amber, lime and cyan individually (0–255). Factory Calibration selects the factory calibration.
LANGUAGE	Chinese or English.
WDMX RESET	YES / NO. The source menu map describes YES as retaining the receiver data and NO as clearing it. Confirm the prompt on the fixture before changing this setting.

Signal selection

SIGNAL option	Input or routing
ONLY XLRDMX	Wired DMX only.
XLRDMX FIRST	Prioritise wired DMX.
ONLY WDMX	Wireless DMX only.
WDMX FIRST	Prioritise wireless DMX.
WDMX TO XLRDMX	Route wireless DMX to the wired DMX output.

Fixture information

INFO / menu item	Display or function
FIXTURE HOURS	Total operating hours.
TEMPERATURE	LED temperature.
VERSION	Installed software version.
RDM □ UID / LABEL	RDM unique identifier and fixture label as reported by the installed firmware.
SYSTEM ERROR	MEMORY IC, ANGLESENSOR or TEMPERATURE information.
UPGRADE FIRMWARE	USB-C firmware update. See page 5.

DMX channel maps

SnowSTAGE Fresnel HEX 1

Select the fixture personality and start address before patching. TR16 is the factory default. The table shows channel numbers relative to the fixture's DMX start address.

RGBALC modes

Function	SSP (10 ch)	TOUR (14 ch)	TR16 (20 ch)
Master dimmer	1	1	1
Master dimmer fine	–	2	2
Red	2	3	3
Red fine	–	–	4
Green	3	4	5
Green fine	–	–	6
Blue	4	5	7
Blue fine	–	–	8
Amber	5	6	9
Amber fine	–	–	10
Lime	6	7	11
Lime fine	–	–	12
Cyan	7	8	13
Cyan fine	–	–	14
Preset colour	–	9	15
CCT	–	10	16
Green adjustment	–	11	17
Strobe	8	12	18
Zoom	9	13	19
Control	10	14	20

HSIC and CMY modes

Channel	HSIC (10 ch)	CMY (10 ch)
1	Intensity	Dimmer
2	Hue	Cyan
3	Hue fine	Magenta
4	Saturation	Yellow
5	Preset colour	Preset colour
6	CCT	CCT
7	Green adjustment	Green adjustment
8	Strobe	Strobe
9	Zoom	Zoom
10	Control	Control

Intensity, the individual colour channels, hue, saturation, fine channels and zoom use values 0–255. See page 10 for the remaining functions.

DMX value reference

SnowSTAGE Fresnel HEX 1

Use these ranges for the corresponding function in any personality that includes it. For preset colour values, see the annex on pages 11 and 12.

Colour temperature

DMX	CCT
0–9	No function
10	1800 K
25	2200 K
40	2700 K
55	3000 K
70	3200 K
85	4000 K
100	4500 K
115	5000 K
130	5600 K
145	6000 K
160	6500 K
175	7000 K
190	8000 K
205 and 255	10,000 K

Green adjustment

DMX	Effect
0–10	No function
11–29	Full minus green
30–69	−99% to −1%
70–129	No function
130–189	1% to 99%
190–255	Full plus green

Strobe

DMX	Effect
0–9	No function
10–99	Slow to fast (0–25 Hz)
100–109	No function
110–179	Thunder / lightning strobe
180–189	No function
190–255	Random strobe

Control

DMX	Function
000–010	No function
011–060	Reserved
061–070	STUDIO
071–080	POWER
081–090	LIVE
091–100	DIMMER SPEED OFF
101–110	DIMMER SPEED HALOGEN
111–120	LINEAR
121–130	SQUARE LAW
131–140	INV. SQUARE LAW
141–150	S-CURVE
151–160	1200 Hz
161–170	2400 Hz
171–180	4000 Hz
181–190	6000 Hz
191–200	25,000 Hz
201–210	ALL RESET
211–255	Reserved

Control timing

Hold the requested value for 3 seconds to execute the control command.

Preset colours

SnowSTAGE Fresnel HEX 1

Presets 1–24. Use these values with the Preset Colour channel or refer to the preset number when using the fixture's STATIC menu.

Preset	DMX	Code	Colour name	x	y
–	0–10	–	No function	–	–
1	11–15	L176	Loving Amber	0.407	0.321
2	16–20	R40	Light Salmon	0.499	0.321
3	21–25	L24	Scarlet	0.561	0.296
4	26–30	L164	Flame Red	0.659	0.302
5	31–35	L747	Easy White	0.389	0.344
6	36–40	R303	Warm Peach	0.448	0.353
7	41–45	L08	Dark Salmon	0.498	0.347
8	46–50	L25	Sunset Red	0.566	0.359
9	51–55	L04	Medium Bastard Amber	0.37	0.335
10	56–60	L237	CID (To Tungsten)	0.43	0.365
11	61–65	R321	Soft Golden Amber	0.477	0.406
12	66–70	L652	Urban Sodium	0.535	0.399
13	71–75	L212	LCT Yellow (Y1)	0.34	0.363
14	76–80	L765	LEE Yellow	0.389	0.412
15	81–85	L513	Ice And A Slice	0.38	0.447
16	86–90	L100	Spring Yellow	0.41	0.502
17	91–95	L244	LEE Plus Green	0.324	0.388
18	96–100	R4430	CalColor 30 Green	0.318	0.44
19	101–105	L122	Fern Green	0.234	0.543
20	106–110	L90	Dark Yellow Green	0.184	0.641
21	111–115	L243	LEE Fluorescent 3600K	0.286	0.37
22	116–120	R92	Turquoise	0.235	0.36
23	121–125	R94	Kelly Green	0.185	0.459
24	126–130	L327	Forest Green	0.162	0.496

x / y • CIE chromaticity coordinates

Preset colours continued

SnowSTAGE Fresnel HEX 1

Presets 25–48. Use these values with the Preset Colour channel or refer to the preset number when using the fixture's STATIC menu.

Preset	DMX	Code	Colour name	x	y
25	131–135	L191	Cosmetic Aqua Blue	0.3	0.318
26	136–140	L728	Steel Green	0.256	0.302
27	141–145	L117	Steel Blue	0.223	0.278
28	146–150	L354	Special Steel Blue	0.173	0.265
29	151–155	L53	Paler Lavender	0.284	0.284
30	156–160	L501	New Colour Blue	0.246	0.249
31	161–165	L174	Dark Steel Blue	0.204	0.205
32	166–170	L165	Daylight Blue	0.159	0.158
33	171–175	L136	Pale Lavender	0.288	0.254
34	176–180	L194	Surprise Pink	0.24	0.183
35	181–185	L142	Pale Violet	0.209	0.148
36	186–190	L700	Perfect Lavender	0.177	0.07
37	191–195	L35	Light Pink	0.335	0.289
38	196–200	L794	Pretty'n Pink	0.335	0.251
39	201–205	L328	Follies Pink	0.335	0.18
40	206–210	L795	Magical Magenta	0.327	0.138
41	211–215	L154	Pale Rose	0.35	0.318
42	216–220	L127	Smokey Pink	0.397	0.265
43	221–225	L192	Flesh Pink	0.41	0.237
44	226–230	L332	Special Rose Pink	0.465	0.193
45	231–235	L790	Moroccan Pink	0.378	0.324
46	236–240	L157	Pink	0.457	0.272
47	241–245	R332	Cherry Rose	0.489	0.295
48	246–250	L128	Cool LED Bright Pink	0.57	0.263
–	251–255	–	No function	–	–

x / y • CIE chromaticity coordinates