STARSHINE LIGHTS PRODUCT MANUAL

PROFESSIONAL LIFTING SERIES

N7

RGBWLIFTING RING LIGHT

51x20WRGBW/DMX512 / 3mlistedtravel



Thank you for choosing the N7. This manual explains the supplied lifting-ring control system, its lighting functions, and the precautions required for professional installation and operation.

1020 W	51 × 20 W	12 / 212 CH
LISTEDPOWER	RGBWLEDSOURCES	DMX512 PROFILES

Read the safety and commissioning instructions before powering or moving the equipment. Specifications and channel functions below are based on the supplied lifting-ring document.

Technical specifications

Thesourcedescribesalifting-ringsystem.Valueswithoutstated units or a defined scope are identified rather than assumed.

Electrical and optical data

Parameter	Source specification
Model	N7
Product type	RGBW lifting ring light
Input voltage	AC 90–240 V
Frequency	50–60 Hz
Listed power	1020 W
Light sources	51 × 20 W, 4-in-1 RGBW LEDs
DMX profiles	12CH / 212CH
Control	DMX512, manual; Slow, Fast and Sound modes in the menu
Strobe	1–25 Hz or random; lightning effect in DMX chart
Display	LCD; English/Chinese menu option
Listed vertical travel	3 m

Mechanical data

Item	Net weight	Gross weight
Lifting unit	23.4 kg	26 kg
Lighting ring	9 kg	12 kg

Dimensions as supplied: lifting unit 53 × 36 × 37; lighting ring 120 × 85. The source does not state their units or identify all measurement axes. Confirm a dimensioned drawing before planning clearances or transport.

SPECIFICATION SCOPE

The source does not establish whether 1020 W covers the complete powered installation or only the lighting assembly. It also does not specify an IP rating, maximum rigging load, complete system weight, or detailed motion speed. Confirm these from the actual equipment and supplier before installation.

Safety and overhead rigging

Thesourcerequiresprofessionaluse,qualifiedelectricalwork,independent fall protection, and a secure lifting installation.

NO OPERATION BELOW AN UNVERIFIED LOAD

Do not permit people beneath or within the travel area of a moving ring. Keep the entire movement path clear, and do not operate the lifting system until the installation and its protective arrangements have been checked.

Before installation

- Read the manual and all equipment safety labels. Use the product only for its intended professional purpose.
- Have a competent rigging professional assess the supporting structure, lifting points, suspension components, and the complete installed load.
- The supplied instructions require support with at least ten times the equipment weight. Apply this requirement through a properly engineered installation and verify the applicable load ratings and local requirements.
- Use an independent safety cable or equivalent secondary retention suitable for the installation. Do not treat the main lifting cable as the only fall-protection measure.
- Do not install or remove the equipment alone. Lower the suspended assembly to a safe position before installation, removal, or service.
- Keep the ring away from flammable materials and ensure that ventilation openings remain unobstructed.
- Do not stare directly into the LED apertures. Avoid exposing nearby people to concentrated light output.

Electrical and movement precautions

- Disconnect mains power before opening a cover, wiring, cleaning, or maintenance. Electrical connections must be performed by qualified personnel.
- Use a properly grounded supply within the specified input range. Do not use damaged cables, plugs, or connectors.
- Inspect suspension hardware and the travel path before each overhead use. Stop operation if any cable, fixing, enclosure, or motion component appears damaged.
- Confirm the operation of any emergency-stop, limit, or other protective devices fitted to the actual system. The supplied document does not define their behavior; do not assume a fail-safe response.

Installation and DMX connection

Apractical commissioningsequenceforaqualifiedinstaller.Confirmtheactualsupplied component count and hardware before lifting.

Installation sequence

Step	Action
01 Inspect	Check the ring, lifting units, cables, connectors, suspension points, and all supplied hardware for shipping damage.
02 Plan	Confirm the full load, overhead structure, suspension geometry, travel path, and required clearance above and below the ring.
03 Rig	Install the lifting units and ring using the approved mounting and secondary-retention arrangement. Secure all connections.
04 Power	Connect the equipment to the appropriate grounded supply. Confirm the nameplate ratings and power distribution requirements.
05 Connect DMX	Connect the controller DMX OUT to the first fixture DMX IN; continue through compatible DMX IN/OUT connections as required.
06 Configure	Select 12CH or 212CH, assign non-overlapping addresses, and confirm the operating mode before enabling motion.
07 Test	With the area clear, perform a controlled low-risk movement and lighting test. Verify travel direction and the actual end limits.

DMX signal path



- Use suitable shielded DMX cable; do not substitute an ordinary audio microphone cable.
- Terminate the final device when required by the DMX installation, particularly on long runs.
- Do not overlap address ranges unless identical control is intentional. Confirm that the controller supports the selected channel profile.

3 M TRAVEL

The source lists 3 m of lifting travel. This is not a substitute for checking the actual installed stroke, lower clearance, and upper clearance. Do not use an unverified distance as a motion limit.

Display and operating modes

TheLCDmenuisoperatedwithMENU,UP,DOWNandENTER.Menulabelsbelow follow the source where available.

Control keys

Key	Function
MENU	Move through menu groups or return to the previous menu.
UP	Increase a value or move to the next option.
DOWN	Decrease a value or move to the previous option.
ENTER	Open a selection, confirm, and save the chosen value.

Main menu

Menu	Available options / function
DMX Settings	Set the DMX starting address and choose 12CH or 212CH. Press ENTER to save.
Run Mode	DMX512, Slow, Fast, Sound, manual.
Invert PAN/TILT	Select YES or NO to reverse the applicable X/Y axis direction.
Display Set	Invert Word; English/Chinese; LCD Backlight on.
Manual Set	Set the manual scene parameters. Run Mode must be set to manual.
Sound Sence	Set sound sensitivity from 0 to 100.
System Set	System information, factory defaults, protected calibration settings.
Reset	Start a fixture reset; the source specifies a 6-second wait.

Run Mode descriptions

Mode	Purpose
DMX512	Operation from an external DMX lighting controller.
Slow	Slow built-in automatic operation.
Fast	Fast built-in automatic operation.
Sound	Sound-active automatic operation.
manual	Manual scene settings; source also describes linked operation.

For the backlight option, YES keeps the LCD illuminated. NO switches the backlight off after approximately 20 seconds without a keypress and restores it on the next keypress.

Manual and system settings

ManualparametersareavailablewhenRunModeissettomanual.Thesource states that the previous power-on state can be restored.

Manual Set

Menu item	Function
TILT	Y-axis / lifting position
Y_SPEED	Y-axis / lifting speed
DIM	Master dimmer
STROBE	Strobe
DIM_R	Red dimmer
DIM_G	Green dimmer
DIM_B	Blue dimmer
DIM_W	White dimmer

System Set

Item	Function
System Information	View system information. Source lists software version V1.
Default Settings	Restore factory settings.
Code Settings	Access protected calibration and LED current settings.
Y_INIT	Y-axis fine adjustment.
Y_STROKE	Y-axis stroke setting.
SET_R / SET_G	Red / green current settings.
SET_B / SET_W	Blue / white current settings.

Factory access sequence: DOWN, DOWN, UP, UP (four key presses), as listed in the supplied document. Access is intended for qualified service personnel.

DO NOT CHANGE TRAVEL CALIBRATION CASUALLY

Incorrect Y_INIT or Y_STROKE settings may affect the physical travel limits. Record original values and obtain the correct service procedure before changing motion calibration or LED current settings.

Reset: Select Reset and wait approximately 6 seconds. Ensure the movement area is clear before resetting; do not use a reset command as an emergency-stop substitute.

DMX512 - 12-channel profile

Allvaluesaredecimal,0–255.Motion,dimming,effects,andresetaredescribed in the supplied channel chart.

Channels 1–12

CH	Function	DMX value	Description
1	Lift position	0–255 0–	Listed 3 m travel; coarse position.
2	Lift fine	255 0–255	16-bit fine adjustment.
3	Lift speed	0–255	Fast to slow.
4	Master dimmer	0–9	Linear dark to bright.
5	Strobe	10–155	No function.
5		156–205	Synchronized strobe, slow to fast (1–25 Hz).
5		206–255 0–	Random strobe.
5		255 0–255	Lightning strobe.
6	Red	0–255 0–	Red dimming, dark to bright.
7	Green	255	Green dimming, dark to bright.
8	Blue	See p. 11	Blue dimming, dark to bright.
9	White	0–255 0–	White dimming, dark to bright.
10	Effect	240 240–	Built-in effect selection.
11	Effect speed	255	Slow to fast.
12	Reset		No function (source-listed range).
12			Fixture reset; 6-second activation.

RESET BOUNDARY

The original 12CH table lists 240 in both the no-function and reset ranges. Keep the reset channel below 240 during normal operation. Verify the firmware behavior before using the reset threshold.

The source does not give an exact millimeter-to-DMX conversion or a certified motion speed. Verify direction, end limits, and travel on the installed system before programming cues.

DMX512 - 212-channel profile

Theextended profile providesindividualRGBWcontrolfor51lightingpositions while retaining common lifting, dimming, and effect controls.

Profile structure

Channel range	Function
1–5	Common lift position, fine, speed, master dimmer, and strobe.
6–209	51 consecutive RGBW blocks, four channels per lighting position.
210	Built-in effect selection.
211	Effect speed.
212	Fixture reset.

Shared channels 1–5

CH	Function	Value / description
1	Lift position	0–255; source lists 3 m travel.
2	Lift fine	0–255; 16-bit fine adjustment.
3	Lift speed	0–255; fast to slow.
4	Master dimmer	0–255; linear dark to bright.
5	Strobe	0–9 no function; 10–155 synchronized 1–25 Hz; 156–205 random; 206–255 lightning.

Individual color blocks

For lighting position **n** (1–51), the color channels are **4n+2** (R), **4n+3** (G), **4n+4** (B), and **4n+5** (W). All color values are 0–255, from dark to bright. This formula expands the manufacturer’s documented first and last RGBW blocks.

Example	R	G	B	W
LED 1	6	7	8	9
LED 2	10	11	12	13
LED 50	202	203	204	205
LED 51	206	207	208	209

PIXEL ORDER

The channel map identifies LED numbers, not their physical clockwise/counterclockwise order on the ring. Confirm actual pixel numbering with a low-output test before designing directional chases.

212CH pixel map - LEDs 1–26

CompleteRGBWaddressreference.Eachrowisonelightingposition;allfour channels accept values from 0 to 255.

Individual LED dimmers

LED	Red	Green	Blue	White
1	6	7	8	9
2	10	11	12	13
3	14	15	16	17
4	18	19	20	21
5	22	23	24	25
6	26	27	28	29
7	30	31	32	33
8	34	35	36	37
9	38	39	40	41
10	42	43	44	45
11	46	47	48	49
12	50	51	52	53
13	54	55	56	57
14	58	59	60	61
15	62	63	64	65
16	66	67	68	69
17	70	71	72	73
18	74	75	76	77
19	78	79	80	81
20	82	83	84	85
21	86	87	88	89
22	90	91	92	93
23	94	95	96	97
24	98	99	100	101
25	102	103	104	105
26	106	107	108	109

All values are fixture-relative channel numbers. Add the selected DMX start address minus one to obtain the absolute controller address.

212CH pixel map - LEDs 27–51

CompleteRGBWaddressreference.Eachrowisonelightingposition;allfourchannels accept values from 0 to 255.

Individual LED dimmers

LED	Red	Green	Blue	White
27	110	111	112	113
28	114	115	116	117
29	118	119	120	121
30	122	123	124	125
31	126	127	128	129
32	130	131	132	133
33	134	135	136	137
34	138	139	140	141
35	142	143	144	145
36	146	147	148	149
37	150	151	152	153
38	154	155	156	157
39	158	159	160	161
40	162	163	164	165
41	166	167	168	169
42	170	171	172	173
43	174	175	176	177
44	178	179	180	181
45	182	183	184	185
46	186	187	188	189
47	190	191	192	193
48	194	195	196	197
49	198	199	200	201
50	202	203	204	205
51	206	207	208	209

All values are fixture-relative channel numbers. Add the selected DMX start address minus one to obtain the absolute controller address.

Effects and reset reference

Thesupplied effect chartcontainsoverlappingranges.Thesourcevalues are retained below and marked for firmware verification rather than silently corrected.

Effect selection - CH10 / CH210

Source value	Source description
0–10	No function.
1–20	Effect 1 - color effect.
20–30	Effect 2 - color selection referenced to channels 3, 4, 5 and 6.
30–40	Effect 3.
40–50	Effect 4.
50–60	Effect 5.
60–255	Effect 6.

EFFECT RANGES REQUIRE CONFIRMATION

The first two source ranges overlap, as do several range boundaries. The description of Effect 2 also references channels that are assigned to lift speed, master dimmer, strobe and red in the documented profile. Confirm the exact macro ranges and color behavior on the installed firmware before publishing a fixture library.

Effect speed and reset

Profile	CH	Value	Function
12CH	11	0–255	Effect speed, slow to fast.
212CH	211	0–255	Effect speed, slow to fast.
12CH	12	0–240 / 240–255	Source lists no function / reset. Boundary overlaps at 240.
212CH	212	0–239 / 240–255	No function / reset; activation for 6 seconds.

Keep reset channels below 240 during ordinary programming. For the 12CH profile, verify the boundary before using reset. A reset may initiate movement; ensure the travel area is clear.

Programming and addressing

Use averified fixtureprofileandreservethefullchannelfootprint.Theexamples below are planning examples, not an on-site test report.

DMX address examples

Profile	Fixture 1	Fixture 2	Next free
12CH	001–012	013–024	025
212CH	001–212	213–424	425

A single DMX universe contains 512 addresses. The highest starting address that fits a complete 12CH footprint is 501; for 212CH it is 301. Two 212CH fixtures use 424 addresses, leaving 88 addresses in that universe.

Coarse and fine movement

Channels 1 and 2 form the source-listed 16-bit lift position control. The usual coarse/fine interpretation combines the values as **256 × coarse + fine**, giving 0–65535. Confirm the actual response before using this interpretation in a motion cue; the source does not provide a calibrated distance conversion.

Illustrative cue preparation

Stage	Recommended action
1 Verify	Confirm the hardware, suspension, travel limits, DMX mode, and actual fixture profile.
2 Patch	Reserve 12 or 212 channels and label each fixture in the controller.
3 Light	With a safe position established, raise the master dimmer and the intended RGBW channels.
4 Motion	Test lift movement at a conservative setting with the area clear. Verify the direction and limits.
5 Build	Create static looks first, then add verified effects and carefully controlled motion.
6 Save	Store cues and the tested safe startup/standby settings for the installation.

NO UNVERIFIED MOTION LIMITS

Do not infer an absolute physical height from a DMX value alone. The installed stroke, calibration, suspension geometry and clearance determine the usable movement range.

Cleaning and maintenance

Regularinspectionandcarefulcleaninghelppreserveopticalperformance and reduce operational risk.

Recommended inspection schedule

When	Action
Before every use	Inspect suspension points, cables, fasteners, power and signal connections. Confirm the travel path is clear.
Regularly	Clean the external housing with a soft, slightly damp, lint-free cloth after disconnecting power.
As needed	Clean optical surfaces carefully with appropriate optical-cleaning materials. Do not scratch coated surfaces.
Regularly	Remove dust from fans and ventilation openings using a soft brush, suitable vacuum or controlled air.
After a fault	Stop operation and have the affected components inspected by qualified service personnel.

Optical and mechanical care

- Disconnect mains power and allow the equipment to cool before cleaning or opening any cover.
- Do not use aggressive solvents on plastic or coated optical surfaces.
- Do not spray liquid into the housing, connectors, or ventilation openings.
- Do not lubricate, adjust, or replace lifting components without the correct service procedure and approved parts.
- Do not operate the system if cables, fasteners, suspension points, or moving parts show abnormal wear.

QUALIFIED SERVICE

Internal electrical work and lifting-system repairs must be performed by qualified personnel. The supplied document does not include a parts-replacement procedure or a certified maintenance interval for the hoist; obtain these from the equipment supplier.

Troubleshooting

Usethechecksbelowonlywhentheequipment is in a safe condition. Disconnect power before inspecting electrical or mechanical connections.

Symptom	Checks / action
No power or display	Check the supply, power cable, protection devices and nameplate compatibility. Refer electrical faults to qualified personnel.
No DMX response	Confirm Run Mode is DMX512, the cable is connected, the start address and profile match, and the controller is transmitting.
Wrong colors / pixels	Check master and individual RGBW values; confirm 12CH vs 212CH and the actual pixel numbering.
No light output	Check the master dimmer, color values and strobe setting. Verify that no active macro is overriding the intended look.
Unexpected movement	Stop operation. Verify the programmed position, speed, direction setting and actual travel limits before resuming.
No sound response	Select Sound mode and adjust Sound Sence between 0 and 100; check the audio environment.
Unexpected effect	Check CH10 or CH210 and the effect-speed channel. Verify ambiguous source macro ranges on the actual firmware.
Abnormal noise / heat	Stop using the equipment. Disconnect power and arrange qualified inspection.

When to stop immediately

Stop operation if the ring cannot move freely, the suspension is damaged, movement becomes unpredictable, or abnormal noise, smell, heat, or electrical behavior occurs. Do not repeatedly reset a faulted lifting system to force continued operation.

SUPPORT INFORMATION

Record the model, serial number, purchase information, software version, selected DMX profile, and a clear description of the fault. Photographs of the display and connections can assist support without requiring unsafe operation.

Technical notes and support

Thiseditiontranslatesandreorganizesthesupplied51-LEDlifting-ringdocument. It does not substitute unknown specifications with those from a different product.

Items requiring confirmation

Item	Publication / commissioning note
Dimensions	The source lists 53 × 36 × 37 and 120 × 85 without units or complete axis labels. Obtain a dimensioned drawing.
Power scope	1020 W is source-listed; confirm whether it covers the complete installation or the lighting assembly.
Motion	The source lists 3 m travel and 16-bit adjustment, but does not define calibrated distance, maximum speed, or safety-device behavior.
Effect macros	The source has overlapping values and an inconsistent color-channel reference. Verify against the actual firmware.
Reset	12CH includes a 240 boundary overlap. Confirm reset operation before building a fixture profile.
System configuration	Confirm the quantity of lifting units, complete installed mass, suspension hardware, and actual supplied components.

Source and expansion policy

The electrical, optical, weight, menu and DMX values in this manual are taken from the supplied manufacturer document. The installation workflow, address examples, maintenance checklist, troubleshooting guidance and commissioning cautions are additional editorial guidance. They are not claims of certification, load testing, or an independently verified product specification.

Starshine Lights support

For equipment-specific installation drawings, firmware/channel confirmation, replacement parts, or service assistance, contact Starshine Lights and provide the N7 model, serial number, software version and purchase information.

Website: www.starshinelights.com

Keep this manual available to the installer and operator. Confirm all unresolved technical items before commissioning the equipment.