B14 PRODUCT MANUAL

Professional installation, control and DMX512 reference

B14 TEN-HEAD RGBW

MOVING EFFECT BAR + AUXILIARY LIGHT



10 × 40 W	17 / 26 / 86	400 W	180°
RGBW MAIN LEDS	DMXCHANNELS	INPUTPOWER	MOTOR TRAVEL

PRODUCT OVERVIEW

The **StarshineLights B14** is a compact ten-head RGBW moving-effect bar with auxiliary lighting. It supports **DMX512, automatic programs, sound-active playback and master/slave operation**, making it suitable for professionally supervised stages, event productions and entertainment-lighting installations.

BEFORE USE Read this manual carefully. Install the fixture securely, keep clear of the moving heads, and never look directly into an active LED aperture.

SAFETY & PRODUCT OVERVIEW

Read this section before mounting, powering or programming B14.

IMPORTANT SAFETY INSTRUCTIONS

- **Electrical:** Operate only from a correctly grounded AC supply within the specified 100-230 V input range. Disconnect power before maintenance or cabling.
- **Rigging:** Use hardware rated for the full fixture load, a qualified installer and a correctly attached independent safety cable for all overhead installations.
- **Optical exposure:** High-intensity LEDs and strobe effects may cause eye discomfort. Do not stare into the lenses or aim intense light at occupied viewing positions.
- **Moving parts:** Keep hands, cables and scenery outside the motor movement envelope. Prevent contact with the heads while repositioning or resetting.
- **Heat and ventilation:** Do not obstruct cooling slots. Keep the unit away from flammable surfaces and allow it to cool before handling.
- **Environment:** Use in dry indoor conditions unless an IP rating is explicitly confirmed on the fixture label. Protect against liquid ingress and condensation.
- **Service:** Do not open the enclosure while connected to power. Stop use if there is smoke, unusual sound, damaged wiring or abnormal movement.

WHAT B14 DOES

Ten RGBW main light heads combine color mixing, dimming, strobes and synchronized or individual movement. Auxiliary light effects and preprogrammed motor sequences are available through the built-in menus and corresponding DMX control channels.

Control modes: DMX512, auto-run, sound-active and master/slave. **Operating interfaces:** a four-button display for addressing and local program selection; a DMX connection for professional control.

PRE-USE INSPECTION

- Confirm that the fixture, power cable, mounting hardware and visible lenses are undamaged.
- Verify the incoming supply and ensure the installation provides sufficient air circulation.
- Check the DMX start address, selected channel mode and motor-clearance area before show operation.

NOTICE The B14 documentation describes high-output LED effects and does not specify a laser source. Do not apply the laser, infrared-remote or dual-head instructions from other products.

TECHNICAL SPECIFICATIONS

Manufacturer-supplied B14 specifications, plus product-image dimensions.

GENERAL PARAMETERS

ITEM	SPECIFICATION
Model / classification	B14 / ten-head RGBW moving-effect bar with auxiliary light
Input voltage	AC 100-230 V (frequency not specified in source manual)
Input power	400 W (manufacturer-stated electrical input rating)
Main light sources	10 × 40 W RGBW 4-in-1 LEDs (component ratings)
Auxiliary light sources	8 × 16 RGB 3-in-1 LEDs (as listed in source manual)
LED lifespan	Up to 50,000 hours (manufacturer-rated)
Control modes	DMX512 / sound-active / auto-run / master-slave
DMX modes	17CH / 26CH / 86CH
Strobe speed	0-20 flashes per second, adjustable
Motor movement	180° (motor angle stated in source manual)
Product size	88 × 10 × 20 cm (L × D × H)
Net weight	7.20 kg
Menu / operation	Four-digit display; MENU, UP, DOWN and ENTER

UNDERSTANDING THE LED FUNCTIONS

COB / main RGBW: The original DMX tables use the term “COB” for the red, green, blue and white main-light dimmer channels. In this manual, *main RGBW* and *COB* refer to the same corresponding channel group.

Auxiliary lighting: The source specification lists RGB auxiliary LEDs, while its DMX tables name cool-white and warm-white auxiliary dimmers. Both descriptions are retained in their relevant sections; verify the actual fixture/firmware before preparing color-critical cues.

SOURCE NOTE Dimensions and net weight come from the B14 measurement graphic supplied with this project. The original seven-page control manual does not specify these values.

INSTALLATION & DMX WIRING

Safe installation and reliable signal distribution.

MOUNTING AND POWER

- **Position:** Use a stable, level surface or approved truss/rigging assembly. Provide sufficient clearance for full motor travel.
- **Fasten:** Inspect all fasteners; for suspended installations, attach a separate rated safety bond to the correct anchor point.
- **Power:** Connect to an earthed AC 100-230 V supply. Do not power damaged equipment; isolate mains before connecting data or cleaning.
- **Ventilation:** Leave ventilation openings unobstructed. Do not cover the fixture or place flammable fabric against the housing.

DMX512 SIGNAL CHAIN



- Use cable intended for DMX512 signaling rather than ordinary unshielded audio cable.
- Daisy-chain data connections between fixtures; avoid passive Y-splits unless using a suitable DMX splitter.
- Terminate the last fixture if required by the installation, especially on long runs.
- To run fixtures independently, assign non-overlapping channel blocks; identical addresses produce matched responses.

ADDRESSING AND CHANNEL FOOTPRINTS

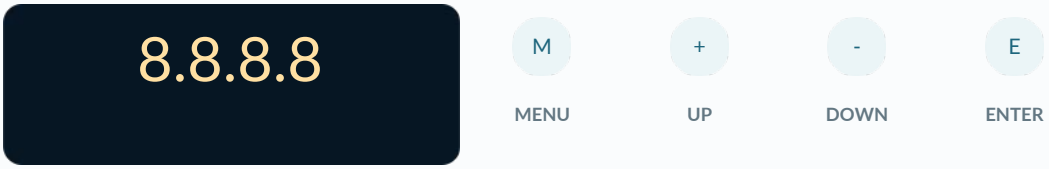
PROFILE	CHANNELS USED	HIGHEST NON-OVERFLOW START
17CH	17	A001-A496
26CH	26	A001-A487
86CH	86	A001-A427

EXAMPLE Two adjacent B14 fixtures in 26CH mode can be patched as A001 (channels 1-26) and A027 (channels 27-52). The local address menu permits 001-512, but the usable starting address depends on the selected footprint.

DISPLAY MENU & LOCAL OPERATION

Four-button panel and on-board show selection.

FRONT PANEL CONTROLS



Use **MENU** to cycle through functions, **UP/DOWN** to change a value and **ENTER** to select or confirm. Menu labels below reproduce the original B14 control documentation.

MENU REFERENCE

DISPLAY	OPTIONS	FUNCTION
Addr	001-512	DMX512 starting address
Chnd	17CH / 26CH / 86CH	DMX profile selection
AU01	AU01-AU08	Eight built-in automatic shows
SU01	SU01-SU08	Sound-active programs; press ENTER to adjust sensitivity (000-099)
diSP	off / on	Display orientation / front-back display setting
Ndir	Ye / no	Reverse motor direction
TEMP	T 30 (example)	Internal temperature readout
V1.0	Version identifier	Firmware version display (value may differ by unit)

QUICK OPERATING PROCEDURES

- **Automatic:** Select AU01-AU08 with the front panel; confirm the chosen show with ENTER.
- **Sound-active:** Select SU01-SU08, then adjust the available microphone sensitivity range 000-099 as needed.
- **DMX:** Select Chnd, assign Addr and patch the corresponding 17, 26 or 86 channels on your controller.
- **Motor reverse:** Use Ndir to reverse motion when the installed orientation requires it.

DMX512 - 17-CHANNEL MODE

Compact control of shared movement, RGBW, auxiliary and preset effects.

17CH CHANNEL ASSIGNMENT

CH	FUNCTION	VALUE	BEHAVIOR
1	Main motor	000-255	Combined motor position
2	Motor speed	000-255	Motor movement speed
3	Master dimmer	000-255	Overall intensity
4	Total strobe	005-255	Global strobe control
5	Main RGBW - red	000-255	Red dimmer
6	Main RGBW - green	000-255	Green dimmer
7	Main RGBW - blue	000-255	Blue dimmer
8	Main RGBW - white	000-255	White dimmer
9	Auxiliary cool white	000-255	Auxiliary dimming
10	Auxiliary warm white	000-255	Auxiliary dimming
11	Main RGBW effects	000-255	30-preset effect selector
12	Main effect speed	000-255	Main RGBW effect speed
13	Auxiliary effects	000-255	30-preset auxiliary selector
14	Auxiliary effect speed	000-255	Auxiliary effect speed
15	Motor effects	000-255	20 motor-pattern selector
16	Motor effect speed	000-255	Motor macro speed
17	Auto / sound / reset	000-255	8 auto shows; sound trigger; motor reset

LOOKUP TABLES Use the common effect tables later in this manual: **main RGBW / auxiliary presets (30)**, **motor presets (20)** and **auto/sound/reset ranges**. Their DMX values are not simple consecutive program numbers.

17CH PROGRAMMING NOTES

Raise CH3 (master dimmer) before testing main RGBW output. CH11/13 choose built-in light-effect macros, while CH15 chooses motor macros. CH17 includes both automatic playback and the reset range, so protect reset values from accidental cue changes.

DMX512 - 26-CHANNEL MODE

Individual motor positioning for ten heads, plus common lighting control.

26CH CHANNEL ASSIGNMENT

CH	FUNCTION	VALUE	BEHAVIOR
1	Motor #1	000-255	Position of head 1
2	Motor #2	000-255	Position of head 2
3	Motor #3	000-255	Position of head 3
4	Motor #4	000-255	Position of head 4
5	Motor #5	000-255	Position of head 5
6	Motor #6	000-255	Position of head 6
7	Motor #7	000-255	Position of head 7
8	Motor #8	000-255	Position of head 8
9	Motor #9	000-255	Position of head 9
10	Motor #10	000-255	Position of head 10
11	Motor speed	000-255	Shared motor speed
12	Master dimmer	000-255	Overall brightness
13	Total strobe	005-255	Global strobe
14	Main RGBW - red	000-255	Red dimmer
15	Main RGBW - green	000-255	Green dimmer
16	Main RGBW - blue	000-255	Blue dimmer
17	Main RGBW - white	000-255	White dimmer
18	Auxiliary cool white	000-255	Auxiliary dimmer
19	Auxiliary warm white	000-255	Auxiliary dimmer
20	Main RGBW effects	000-255	30 preset patterns
21	Main effect speed	000-255	Main effect speed
22	Auxiliary effects	000-255	30 preset patterns
23	Auxiliary effect speed	000-255	Auxiliary effect speed
24	Motor effects	000-255	20 motor patterns
25	Motor effect speed	000-255	Movement-effect speed
26	Auto / sound / reset	000-255	8 auto / sound / motor reset

WHY CHOOSE 26CH? Use this profile for ten independently addressable motor positions while retaining shared RGBW and auxiliary-light dimmers. To gain per-head color and auxiliary channels, select 86CH instead.

DMX512 - 86CH BASE MAP

The first 26 channels retain the 26CH profile functions.

CHANNELS 1-26 IN 86CH MODE

CH	FUNCTION	VALUE	BEHAVIOR
1	Motor #1	000-255	Position of head 1
2	Motor #2	000-255	Position of head 2
3	Motor #3	000-255	Position of head 3
4	Motor #4	000-255	Position of head 4
5	Motor #5	000-255	Position of head 5
6	Motor #6	000-255	Position of head 6
7	Motor #7	000-255	Position of head 7
8	Motor #8	000-255	Position of head 8
9	Motor #9	000-255	Position of head 9
10	Motor #10	000-255	Position of head 10
11	Motor speed	000-255	Shared motor speed
12	Master dimmer	000-255	Overall brightness
13	Total strobe	005-255	Global strobe
14	Main RGBW - red	000-255	Red dimmer
15	Main RGBW - green	000-255	Green dimmer
16	Main RGBW - blue	000-255	Blue dimmer
17	Main RGBW - white	000-255	White dimmer
18	Auxiliary cool white	000-255	Auxiliary dimmer
19	Auxiliary warm white	000-255	Auxiliary dimmer
20	Main RGBW effects	000-255	30 preset patterns
21	Main effect speed	000-255	Main effect speed
22	Auxiliary effects	000-255	30 preset patterns
23	Auxiliary effect speed	000-255	Auxiliary effect speed
24	Motor effects	000-255	20 motor patterns
25	Motor effect speed	000-255	Movement-effect speed
26	Auto / sound / reset	000-255	8 auto / sound / motor reset

CONTINUED In 86CH mode, **CH27-66** provide ten sets of individual RGBW dimmers, and **CH67-86** provide ten pairs of individual auxiliary-light dimmers. The complete per-head allocation appears on the next page.

DMX512 - 86CH PER-HEAD MAP

Explicit channel allocation for ten heads in extended-control mode.

INDEPENDENT RGBW INTENSITY: CH27-66

HEAD	RED	GREEN	BLUE	WHITE
Head 01	CH27	CH28	CH29	CH30
Head 02	CH31	CH32	CH33	CH34
Head 03	CH35	CH36	CH37	CH38
Head 04	CH39	CH40	CH41	CH42
Head 05	CH43	CH44	CH45	CH46
Head 06	CH47	CH48	CH49	CH50
Head 07	CH51	CH52	CH53	CH54
Head 08	CH55	CH56	CH57	CH58
Head 09	CH59	CH60	CH61	CH62
Head 10	CH63	CH64	CH65	CH66

All individual RGBW channels use **000-255** dimmer values (dark to bright). Use them for per-head chases, gradients and custom pixel-like sequences without relying entirely on built-in programs.

INDEPENDENT AUXILIARY CHANNELS: CH67-86

HEAD	AUX. COOL-WHITE DIMMER	AUX. WARM-WHITE DIMMER
Head 01	CH67	CH68
Head 02	CH69	CH70
Head 03	CH71	CH72
Head 04	CH73	CH74
Head 05	CH75	CH76
Head 06	CH77	CH78
Head 07	CH79	CH80
Head 08	CH81	CH82
Head 09	CH83	CH84
Head 10	CH85	CH86

IMPORTANT The auxiliary channel names above follow the manufacturer DMX table. Its technical-parameter section instead lists RGB 3-in-1 auxiliary LEDs. Confirm the actual light source and firmware response during commissioning; do not assume these channels directly set RGB auxiliary colors.

DMX EFFECT VALUES - LIGHTING

Main RGBW (COB) and auxiliary-light effect selector ranges.

30 BUILT-IN LIGHTING EFFECTS

The same 30-value pattern map is listed for **main RGBW effects** and **auxiliary-light effects**. Selectors are CH11 / CH13 (17CH) or CH20 / CH22 (26CH and 86CH).

VALUE	PROGRAM	VALUE	PROGRAM
000-009	No effect	128-135	Effect 16
010-015	Effect 1 - automatic loop	136-143	Effect 17
016-023	Effect 2	144-151	Effect 18
024-031	Effect 3	152-159	Effect 19
032-039	Effect 4	160-167	Effect 20
040-047	Effect 5	168-175	Effect 21
048-055	Effect 6	176-183	Effect 22
056-063	Effect 7	184-191	Effect 23
064-071	Effect 8	192-199	Effect 24
072-079	Effect 9	200-207	Effect 25
080-087	Effect 10	208-215	Effect 26
088-095	Effect 11	216-223	Effect 27
096-103	Effect 12	224-231	Effect 28
104-111	Effect 13	232-239	Effect 29
112-119	Effect 14	240-255	Effect 30
120-127	Effect 15		

SELECTOR / SPEED PAIRS 17CH: main CH11 + speed CH12; auxiliary CH13 + speed CH14. **26CH and 86CH:** main CH20 + speed CH21; auxiliary CH22 + speed CH23.

EFFECT PROGRAMMING TIPS

- Choose the effect selector first, then adjust the relevant effect-speed channel.
- The source identifies numbered presets but does not describe their visual shapes; preview each program in the installed venue before storing show cues.
- Individual motor and RGBW channels may interact with a selected built-in macro depending on the running firmware.

DMX EFFECT VALUES - MOVEMENT

Motor patterns and automatic or sound-active program selection.

20 MOTOR PRESET EFFECTS

VALUE	PROGRAM	VALUE	PROGRAM
000-011	No effect	132-143	Effect 11
012-023	Effect 1	144-155	Effect 12
024-035	Effect 2	156-167	Effect 13
036-047	Effect 3	168-179	Effect 14
048-059	Effect 4	180-191	Effect 15
060-071	Effect 5	192-203	Effect 16
072-083	Effect 6	204-215	Effect 17
084-095	Effect 7	216-227	Effect 18
096-107	Effect 8	228-239	Effect 19
108-119	Effect 9	240-255	Effect 20
120-131	Effect 10		

Motor effect selectors: **CH15** in 17CH; **CH24** in 26CH/86CH. Corresponding motor effect speed channels: **CH16** and **CH25**.

AUTOMATIC PLAYBACK, SOUND ACTIVATION & RESET

VALUE	FUNCTION
000-049	No effect
050-069	Automatic program 1
070-089	Automatic program 2
090-109	Automatic program 3
110-129	Automatic program 4
130-149	Automatic program 5
150-169	Automatic program 6
170-189	Automatic program 7
190-209	Automatic program 8
210-249	Sound-active program
250-255	Motor reset

CRITICAL CHANNEL The auto / sound / reset function is **CH17** in 17CH mode and **CH26** in 26CH / 86CH mode. Avoid sending 250-255 during a performance unless a motor reset is intended.

PROGRAMMING & DAILY OPERATION

A practical workflow for B14 operators and lighting technicians.

RECOMMENDED DMX COMMISSIONING SEQUENCE

1. With power isolated, finish the physical installation, safety checks and DMX cable routing.
2. Choose 17CH, 26CH or 86CH according to the required amount of independent control.
3. Assign a valid DMX start address and patch the same number of channels on the controller.
4. Verify the selected head positions at low intensity before applying full output or faster motor changes.
5. Raise the master dimmer and individual RGBW levels to test each head and auxiliary section.
6. Test effect selectors, macro speed and automatic scenes. Check all strobe cues for suitability.
7. Save the verified showfile and make a record of the B14 profile, start address and installation position.

CHOOSING A CHANNEL MODE

MODE	BEST FOR	CAPABILITY
17CH	Fast setup / shared motors and RGBW	Best for compact presets and simple linked patterns.
26CH	10 individual motor positions	Best for coordinated position chases.
86CH	10 individual RGBW + auxiliary pairs	Best for detailed programming and multisegment looks.

BUILT-IN OPERATION WITHOUT DMX

For independent playback use **AU01-AU08**. To synchronize with music choose **SU01-SU08** and adjust voice sensitivity **000-099**. For a master/slave rig, configure one source fixture for playback and compatible followers for slave operation, then test matching firmware and response before showtime.

> **SAFE CUE PRACTICE** Whenever possible, build a low-intensity test cue for each programmed effect. Use a controlled blackout or power isolation before working around moving heads.

MAINTENANCE & TROUBLESHOOTING

Preventive care and practical fault checks for B14.

RECOMMENDED INSPECTION SCHEDULE

WHEN	WHAT TO CHECK
Before each use	Inspect power cable, housing, lens surfaces, mounting bolts and safety attachment.
Weekly	Remove exterior dust with a soft dry or lightly damp lint-free cloth while disconnected.
Monthly	Check airflow openings and gently clean optical surfaces with suitable optical materials.
After transport	Inspect motor movement, connectors and loose hardware before rigging.
As needed	Stop operation for excess heat, smell, noise, abnormal flashing or unexpected movement.

TROUBLESHOOTING GUIDE

SYMPTOM	RECOMMENDED CHECK
No power / display	Check the mains supply, grounded outlet, cord integrity and breaker; disconnect before inspecting.
No output in DMX mode	Check control mode, DMX address, master dimmer, color levels and effect/strobe values.
Fixtures do not match	Compare DMX address, 17/26/86CH mode, motor reverse and firmware behavior.
No sound response	Select SU01-SU08, adjust sensitivity and verify that sound is reaching the microphone.
Unexpected motor motion	Check motor channel values and macro selectors; confirm that reset range is not active.
One head not responding	Confirm correct 86CH per-head mapping or 26CH motor addressing; consult service if hardware fault persists.

SERVICE & SUPPORT

Switch off and disconnect mains power before any inspection or cleaning. Internal electrical and mechanical repair should be carried out only by qualified service personnel. When requesting support, provide the **B14** model identifier, serial number, firmware version shown in the menu and a description of the issue.

STARSHINELIGHTS Website: **www.starshinelights.com** | Keep this English manual with the fixture for future reference.

QUICK REFERENCE & IMPORTANT NOTES

Keep this page close to your controller during setup.

OPERATING CHEAT SHEET

PARAMETER	B14 VALUE / REFERENCE
Model	B14
Input	AC 100-230 V; 400 W stated input
Light sources	10 × 40 W RGBW 4-in-1 + auxiliary (source lists 8 × 16 RGB 3-in-1)
Movement	180° motor angle
DMX footprint	17 / 26 / 86 channels
Built-in programs	AU01-AU08; SU01-SU08
Sound sensitivity	000-099
Strobe	0-20 flashes/s
Physical size / net weight	88 × 10 × 20 cm / 7.20 kg
Preset pages	Lighting effects p10; motor/auto p11
Motor reset	17CH: CH17 250-255; 26/86CH: CH26 250-255

DOCUMENTATION AND VERIFICATION NOTES

This manual has been professionally edited and expanded from the supplied B14 factory control manual. Original channel numbers, control value ranges, menu codes and the stated technical ratings have been preserved. For clarity, tables standardize “passage” / “pass-through” to the industry term **DMX channel**.

The original reference does not include a wiring pinout, ingress-protection rating, operating temperature range or complete descriptions of the factory preset appearances; none are asserted here. Confirm model-specific hardware differences, electrical frequency, and the discrepancy between auxiliary LED specifications and DMX auxiliary labels before releasing a production print run.

IMPORTANT The light source component ratings and 400 W input-power rating should not be added together or interpreted as tested optical output. Ratings and estimated LED lifespan are quoted from the manufacturer material.