

MOBILE

SPOT 50



CKU-6100

USER MANUAL



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Please read these instructions carefully before use. Operating this fixture according to these instructions is important to avoid any possible damage or accidents caused by misuse.

Introduction

Package Contents

- Mobile Spot 50
- Power Cable
- IR Remote
- Hanging Bracket
- QR Guide

Caution! Opening this unit voids warranty. Contact ColorKey for any service requests.

Warning! To avoid electrical shock, be sure to disconnect power before any service or when moving or setting up the fixture.

Service & Support

ColorKey offers a standard 2-year warranty, now extended to 3 years in the USA when you register your product online. For technical support or to register your product, please visit <https://www.colorkeyled.com/support/>

You can also reach us by phone Monday thru Friday, 8:30am –5pm PST at (818) 578-4030.



Product Safety

This product safety section contains essential safety information regarding the installation, operation, and maintenance of the Mobile Spot 50.

ALWAYS:

- Connect to a properly grounded electrical outlet.
- Only use with voltage levels specified on the product's specification label.
- Unplug the unit before replacing the fuse.
- Disconnect from power when not in use for extended periods.
- Secure with a safety cable when mounting overhead.
- Follow all safety instructions and limitations shown on the specification label.
- Install in an area with at least 20 inches (50 cm) of ventilation clearance.
- Only replace fuses with the same type and rating.
- In the event of a major malfunction, stop using the product immediately.

DO NOT:

- Open the unit or attempt internal repairs, as it contains no user-serviceable parts.
- Look directly at the light source while the product is powered on.
- Use the product if the power cable is pinched or damaged.
- Unplug the unit by pulling on the power cable.
- Place flammable materials near the unit while it is operating.
- Touch the housing while the product is in motion.
- Block any airflow vents or slots in the housing.
- Connect the unit to a dimmer or variable voltage device.
- Lift or carry the unit by the power cable.
- Operate in temperatures exceeding 104°F (40°C).
- Expose the unit to conditions beyond its specified IP (Ingress Protection) rating.
- Use in rainy or moist environments.
- Operate the product outdoors.
- Submerge the product in any liquid.
- Use in environments with corrosive elements such as high humidity, salt, extreme heat, pressure, radiation, or mechanical shock.
- Place the product directly on flammable surfaces.

Product Overview

Front



1. Lense
2. Manual Focus
3. Head
4. Yoke
5. Wireless DMX On/OFF
6. Menu
7. Menu Control buttons
8. Mic input for sound active
9. IR Remote
10. Charging Indicator
11. Battery Status
12. Power IN
13. Fuse
14. On/Off Switch
15. DMX IN
16. DMX OUT
17. IR Remote Receiver
18. Wireless DMX Group ID Selector
19. Wireless Group ID LED
20. Hanging Bracket

Back



Bottom



Mounting

Orientation

The Mobile Spot 50 may be mounted on a flat surface using the rubber feet or hung upside-down using the included bracket; however, make sure there is adequate ventilation around the product.

Rigging

- Before deciding on a location, make sure there is easy access to the product for maintenance and programming.
- Make sure adequate ventilation is provided around the product.
- Make sure that the structure or surface onto which you are mounting the product can support the products weight.
- Mount the product securely to a rigging point, weather an elevated platform or a truss.
- When rigging the product onto a truss, use a mounting clamp of the appropriate weight capacity.
- When power linking multiple products, mount the products close enough for power linking cable to reach.
- The rubber feet also serve as floor supports and allow for surface mounting. When mounting the product on the floor, make sure that the product and cables are away from people.

Display Operation



Buttons

MENU: Access the menu | Scroll through menu | Exit without saving

Enter: Select the current menu option | Exit and save setting

UP: Scroll through menu options | Increase parameter value

DOWN: Scroll through menu options | Decrease parameter value

Wireless DMX:



Wireless DMX OFF



Wireless DMX ON

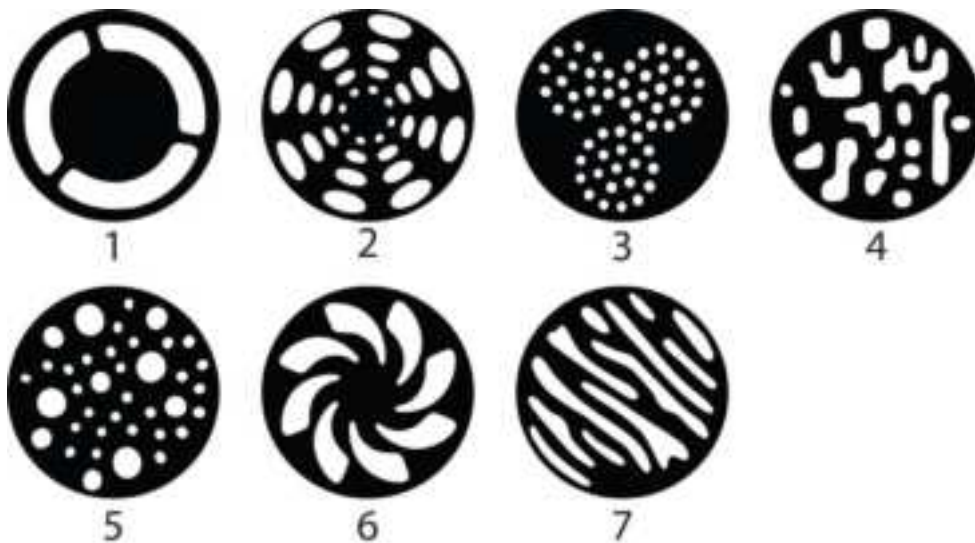
Menu Guide

Main Menu	Values	Description
Addr	A001 - A512	DMX Address
CHNd	9CH / 11CH	DMX Channel Mode
SLNd	SL 1	DMX512 Mode
	SL 2	Slave Mode
	Aut 1	Auto Program 1 - High Energy - Full Room
	Aut 2	Auto Program 2 - Slow Scan - Full Room
	Aut 3	Auto Program 3 - High Energy - Focused Forward
	Aut 4	Auto Program 4 - Slow Scan - Focused Forward
	Sou 1	Sound Program 1 - High Energy - Full Room
	Sou 2	Sound Program 2 - Slow Scan - Full Room
	Sou 3	Sound Program 3 - High Energy - Focused Forward
	Sou 4	Sound Program 4 - Slow Scan - Focused Forward
SEnS	00 - 99	Sound Sensitivity for Sound Programs
bLNd	bLac	DMX Signal Loss - Enter blackout
	HoLd	DMX Signal Loss - Hold last DMX instruction
	Auto	DMX Signal Loss - Enter Auto Program mode
	Soun	DMX Signal Loss - Enter Sound Program mode
LEd	On	Screen always on
	Off	Screen time out after 5 seconds
dISP	YES	Reverse display
	no	Normal display
rPan	YES	Reverse pan operation
	no	Normal pan operation
rTlt	YES	Reverse tilt operation
	no	Normal tilt operation
rEst		System Reset
Ir	Iron	IR remote receiver on
	IroF	IR remote receiver OFF

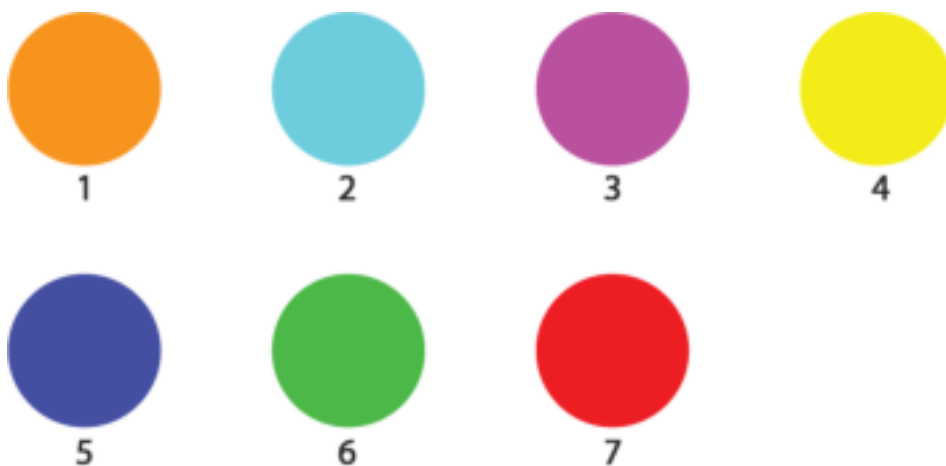
Gobo and Color Channel Assignments

The Mobile Spot 50 comes equipped with one metal gobo wheel containing 7 gobos + open and one color wheel containing 7 colors + open.

Gobos



Color Wheel



DMX Values

9 CH	11 CH	Function	Value	Description
1	1	Pan	0-255	Pan 540 degree move
	2	Pan Fine	0-255	Pan Fine
2	3	Tilt	0-255	Tilt 200 degree move
	4	Tilt Fine	0-255	Tilt Fine
3	5	Color	Color Selection	
			0-9	White
			10-19	Orange
			20-29	Cyan
			30-39	Magenta
			40-49	Yellow
			50-59	Blue
			60-69	Green
			70-79	Red
			80-89	Red + Green
			90-99	Green + Blue
			100 - 109	Blue + Yellow
			110 - 119	Yellow + Magenta
			120 - 129	Magenta + Cyan
			130 - 139	Cyan + Orange
			140 - 255	Color Cycle (Slow to Fast)
4	6	Gobo	Gobo Selection	
			0 - 7	Open
			8 - 15	Gobo 1
			16 - 23	Gobo 2
			24 - 31	Gobo 3
			32 - 39	Gobo 4

			40 - 47	Gobo 5
			48 - 55	Gobo 6
			56 - 63	Gobo 7
			64 - 71	Open
			72 - 79	Gobo 1 Shake (Slow to Fast)
			80 - 87	Gobo 2 Shake (Slow to Fast)
			88 - 95	Gobo 3 Shake (Slow to Fast)
			96 - 103	Gobo 4 Shake (Slow to Fast)
			104 - 111	Gobo 5 Shake (Slow to Fast)
			112 - 119	Gobo 6 Shake (Slow to Fast)
			120 - 127	Gobo 7 Shake (Slow to Fast)
			128 - 255	Gobo Cycle (Slow to Fast)
5	7	Strobe	0 - 9	No Function
			10 - 249	Linear Strobe (Slow to Fast)
			250 - 255	No Function
6	8	Master Dimmer	0-255	0-100% linear dimmer from dark to brighter
7	9	PT Speed	0-255	Speed from slow to fast
8	10	Auto & Sound Programs	0 - 59	No Function
			60 - 84	Auto 1
			85 - 109	Auto 2
			110 - 134	Auto 3
			135 - 159	Auto 4
			160 - 184	Sound 1
			185 - 209	Sound 2
			210 - 234	Sound 3
			235 - 255	Sound 4
9	11	Auto Movement & Reset	0 - 20	No Function
			21 - 100	Auto Pan
			101 - 199	Auto Tilt
			200 - 249	Auto Pan & Tilt
			250 - 255	Reset (5 seconds)

Wireless Connections

Your Mobile Spot 50 can connect wirelessly to other fixtures using specific 2.4G wireless DMX frequencies referred to as Group IDs 01-07. Your fixture can act as a Master, Slave, or it can be controlled by an external Wireless DMX controller.

Wireless DMX ON/OFF:

To turn the wireless DMX function On or OFF press the Wireless DMX button on the front of the fixture:



Group ID Overview:

Group ID assigns fixtures to a specific wireless control group.

To set the fixtures group ID, locate the “Wireless Group ID” button on the bottom of the fixture (see Page 5 - #18). Pressing the button changes the current assigned ID. The color of the LED will indicate the current Group ID.

Group ID	LED Color
01	Red
02	Green
03	Yellow
04	Blue
05	Magenta
06	Cyan
07	White

The LED will blink green when the Mobile Spot 50 is successfully connected to a wireless transmitter.

Master / Slave Settings

In a Master/Slave configuration, one Mobile Spot 50 (Master) can be used to control multiple other Mobile Spot 50s (Slaves) providing a synchronized light show.

Master Fixture:

To set a Master fixture, do the following:

1. Press (Menu) repeatedly to cycle to “SLnd” and press (ENTER)
2. Use (UP) or (Down) to select an Auto or Sound active program and press (ENTER)
3. Depress (Wireless DMX) to turn on wireless DMX transmitter / receiver
4. Press (Wireless Group ID) on bottom of fixture to choose group ID

Slave Fixtures:

To set a Slave fixture, do the following:

1. Press (Menu) repeatedly to cycle to “SLnd” and press (ENTER)
2. Use (UP) or (DOWN) to locate “SL 2” and press (ENTER)
3. Depress (Wireless DMX) to turn on the wireless DMX transmitter / receiver
4. Press (Wireless Group ID) on bottom of fixture to choose same group ID as Leader fixture
5. The Group ID LED indicator will blink when connected

Wireless DMX

Connecting to a wireless DMX transmitter:

To connect to a wireless DMX controller, do the following:

1. Turn on your wireless DMX transmitter and set the transmitter’s group ID
2. Turn on your Mobile Spot 50
3. Press (Menu) repeatedly to cycle “CHNd” and press enter
4. Use (UP) or (DOWN) to set operating Channel Mode, (9ch, 11Ch)
5. Press (Enter) to save
6. Press (Menu) repeatedly to cycle “Addr” and press (ENTER)
7. Use (UP) and (DOWN) to set the Mobile Spot 50’s DMX address
8. Press (Enter) to save.
9. Depress (Wireless DMX) to wireless DMX ON
10. Press (Wireless Group ID) on bottom of fixture to choose same group ID as your wireless transmitter.
11. The Group ID LED indicator will blink when connected

Stand Alone Settings

To use your Mobile Spot 50 without a DMX Controller, use one of the various standalone modes below.

***Note: Standalone operation (ex: Auto or Sound Active) may cause the fixture to transmit DMX data. To prevent interference with other fixtures, do not connect it to a DMX network unless part of a proper Master/Slave configuration. ***

Automatic Programs

To run the Mobile Spot 50 in Automatic Mode, follow the instructions below:

1. Press (Menu) repeatedly to location "SLnd" and press (ENTER)
2. Press (UP) or (Down) to scroll through "Aut 1" through "Aut 4"
3. Press (Enter) to select

Aut 1 (Auto Program 1) = Slow scan, full room coverage

Aut 2 (Auto Program 2) = Fast, energetic moves across full room

Aut 3 (Auto Program 3) = Slow can, forward-facing only

Aut 4 (Auto Program 4) = Fast and energetic, forward-facing only

Sound Active Programs

To run the Mobile Spot 50 in sound-active mode, do the following:

1. Press (Menu) repeatedly to location "SLnd" and press (ENTER)
2. Press (UP) or (Down) to scroll through "Sou 1" through "Sou 4"
3. Press (Enter) to select

Sou 1 (Sound Program 1) = Slow scan, full room coverage

Sou 2 (Sound Program 2) = Fast, energetic moves across full room

Sou 3 (Sound Program 3) = Slow can, forward-facing only

Sou 4 (Sound Program 4) = Fast and energetic, forward-facing only

Sound Sensitivity

To set the Sound Active sensitivity on the Mobile Spot 50, follow the instructions below:

1. Press (Menu) repeatedly to location "SEnS" and press (ENTER)
2. Press (UP) or (DOWN) to increase or decrease sensitivity.
3. Press (ENTER) to save

Pan and Tilt Invert

When two units are Master/Slaved and placed on opposite sides of the DJ booth, enabling Pan and Tilt Invert on one fixture will make it mirror the other. This creates a more dynamic and visually interesting light show.

1. Press (Menu) repeatedly to location "rPAn" and press (ENTER)
2. Press (UP) or (DOWN) to change the setting to "YES" and press (ENTER)
3. Press (Menu) repeatedly to location "rtiL" and press (ENTER)
4. Press (UP) or (DOWN) to change the setting to "YES" and press (ENTER)

Screen Invert

When hanging the light upside down, the screen can be rotated 180° for easier operation of the menu. To set the display orientation on the Mobile Spot 50, follow the instructions below:

1. Press (Menu) repeatedly to location "dISP" and press (ENTER)
2. Press (UP) or (Down) to change setting "yes" or "no" and press (ENTER)
 - a. "yes" = normal rotation
 - b. "no" = 180 degree rotation

IR Remote Overview

STROBE: Toggles the strobe effect on or off

Black Out: Toggles all light output on or off

Auto Select: Activates Auto Programs.
 < and > scroll through auto programs 1 through 4

Color +/-
 Manual Color selection

Gobo +/-
 Manual Gobo selection

Color Speed +/-
 Activate color scrolling
 + increases speed
 - decreases speed



SAVE: The light saves current remote settings and restores them after reboot.

Select: Activates Sound Active Programs.
 < and > scrolls through sounds programs 1 through 4

Pan +/-
 Increases or decreases manual pan angle

TILT +/-
 Increases or decreases manual tilt angle

Gobo Speed +/-
 Activate gobo scrolling
 + increases speed
 - decreases speed

IR Remote Troubleshooting

Check if the remote is sending a signal by confirming that the red LED on the front lights up when a button is pressed. If red LED does not light up, please replace battery (CR2025).

The IR remote uses infrared signals, which require a direct line of sight to the receiver on the back of the Mobile Spot 50. Make sure you are pointing the remote directly at the receiver for proper operation. (see page 5 - #17)

Ensure that the Mobile Spot 50s IR function is turned on.

- 1) On the Mobile Spot 50 press (MENU) repeatedly to locate "1r" and press (ENTER).
- 2) Press (UP) or (DOWN) to locate "1ron" and press (ENTER)

Battery Life and Specifications

Mobile Spot 50 features a rechargeable lithium-ion battery for wire free use. The battery can power the light for up to 5 hours from a full charge.

Charging

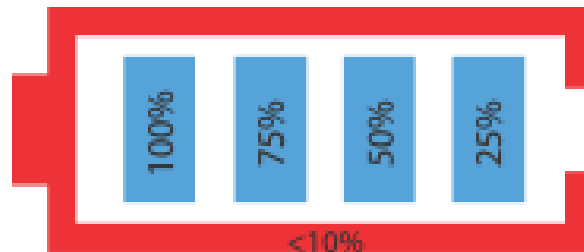
When plugged in, the CHARGING LED indicator will illuminate and indicate charging status

- Red LED indicates charging.
- Green LED indicates fully charged.



Battery Life Indicator

The current battery charge status is illuminated on the back of the fixture.



Battery Specification

- Battery Life: 5 Hours
- Battery charge time: 6 hours
- Battery Cycle Life: average lifetime is 500 charges
- Battery Type: Lithium Ion
- Battery Voltage: 12 VDC
- Battery Capacity: 20000 mAH

Battery Troubleshooting

Issue	Resolution
My Mobile Spot 50 is charging very slowly.	The Mobile Spot 50 features a high-capacity 20Ah battery and a powerful LED engine. While the light can operate normally when plugged in—even if the battery is fully drained—charging will be extremely slow during use. For significantly faster charging, we recommend turning the fixture off while it's plugged in.
My Mobile Spot 50 is not charging	Please try replacing the fuse, see Page 5 - #13 for fuse location. Fuse type: F5AL250V

Maintenance

Dust build-up reduces light output performance and can cause overheating. This can lead to reduction of the light sources life and or mechanical wear. To maintain optimum performance and minimize wear, clean your lighting products regularly after extended use. However, be aware that usage and environmental conditions could be contributing factors to increase the cleaning frequency.

To clean the product, follow the instruction below:

1. Unplug the product from power.
2. Wait until the product is at room temperature.
3. Use a vacuum (or dry compressed air) and a soft brush to remove dust collected on the external surface/vents.
4. Clean all transparent surfaces with a mild soap solution, ammonia-free glass cleaner, or ISO.
5. Apply the solution directly to a soft, lint free cotton cloth or a lens cleaning tissue.
6. Softly drag any dirt or grime to the outside of the transparent surface.
7. Gently polish the transparent surfaces until they are free of haze and lint.

Technical Information

Main Lamp

Type.....	30W White LED
Temperature.....	7,000k
Illuminance	5,070 lux @ 2 meters
Beam Angle	11.2°
Lens Diameter	46mm
LED Lifetime	20,000 hours

Dynamic Effects

Color Wheel	7 colors + white, indexing, continuous rotation
Gobo Wheel	7 static metal gobos plus open
Dimmer/Shutter.....	0-100% continuous dimming, linear strobe 1-20hz
Focus.....	Manual
Pan	540°+fine
Tilt	200°+fine

Control

DMX Channels.....	9 & 11
Display.....	7 segment display

Electrical

AC Power	100 – 240V, 50/60 Hz
Max Power Consumption.....	45W
Battery Life	5 Hours
Battery Charge Time.....	6 hours
Battery Cycle Life.....	500 cycles
Battery Type	Lithium Ion
Battery Voltage	12 VDC
Battery Capacity	20000 mAh

Connections

Power	IEC In
DMX.....	Wireless DMX, 3-pin DMX In/Out

Physical

Length..... 19cm (7.5")
 Width..... 20.5cm (8")
 Height.....29.5cm (11.6")
 Weight 4.2kg (9.25lbs)
 Protection Rating IP20

Please note: As we continue to work towards improving our products and your experience as a user, we recommend that you check our website periodically for updates to user manuals and specifications at www.ColorKeyLED.com or you may contact us directly at info@colorkeyled.com.



Document Revision

Please visit www.colorkeyled.com for the latest version

Revision	Date	Description
1	06/2025	Initial Release