



MINI-150B Mini Bowens Bi-color LED Light

Ver: B

USER MANUAL

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Thank you for choosing SWIT products. Please read the instructions before using, and keep it for future reference.

Specification

Optical Parameters			
Color Temperature	2700K-6500K		
Brightness	0%-100%		
Illuminance	See [Photometric Data] section		
CRI	98		
TLCI	98		
SSI(D55)	73		
Half-Peak Beam Angle	Approx. 60° (bare lamp) Approx. 32° (with MINI Bowens Mount Standard Reflector)		
Dimming Curve			
Dimming Curve Types	Linear, Log., Exp., S-Curve		
Control Method			
Control Method	On-unit control, APP		
Power Supply Specifications			
Battery	Continuous Output Mode (Continuous)	Input Voltage Range: DC 11–16.8V, constant 110W output	
	Turbo Max. Output Mode (Turbo)	1.Input Voltage Range: DC 12.5–16.8V 2.Full 150W output when battery voltage > 13V 3.Power derating activated when battery voltage ≤13V	
USB-C Adapter	Manual Power Mode Selection	Adapter Output	DC 28V/5A (140W Max.)
		Mains Input Voltage Selection (Mains Vo.)	AC 100–127V or AC 220–240V (select one)
		Max. Overall Power Consumption	100-127V: 110W±5W 220-240V: 120W±5W
	PD Adaptive Identification	PD Adapter Output Spec	Max. Lamp Power Draw
		DC 20V/5A (100W Max.)	90W
		DC 20V/3.25A (65W Max.)	50W
		DC 20V/2.25A (45W Max.)	40W
		DC 15V/3A (45W Max.)	40W
Fan Control			
Available Operation Modes	Auto, High, Medium, Low, Off		
Power Limit	when Fan = Off: Max. 30W total power draw Notes: 1.Fan-off function only available when input voltage ≥ DC 24V 2.This restriction applies to all mains voltage ranges		
Dimensions & Weights			
Dimension	See Figure 1 and Figure 2 for details		
Weight	Approx. 1 Kg (MINI-150B) Approx. 80g (Tripod Adapter Base) Approx. 173g (Bowens Mount Adapter) Approx. 55g (MINI Bowens Mount Standard Reflector) Approx. 98g (MINI Bowens Mount Standard Reflector + Diffuser)		

Note:

1. Battery Selection Requirements:

- 1) Interface: V-Mount;

- 2) Continuous load output current: no less than 10A;
- 3) Using a battery that does not meet the above requirements may result in insufficient power supply, failure of the light to start, or abnormal operation of the light.

2.The Manual Power Mode Selection function only works with DC 28V/5A USB-C adapters.

3.USB-C Adapter Selection Requirements:

- 1)Must support fast charging protocols (fast-charge protocols include: PD2.0/PD3.0/PD3.1, QC2.0/QC3.0);
- 2)Output power: no less than 40W;
- 3)Using a USB-C adapter that does not meet the above requirements may cause abnormal power supply or even damage to the light.

Please be sure to confirm that the adapter meets the above requirements before connecting.

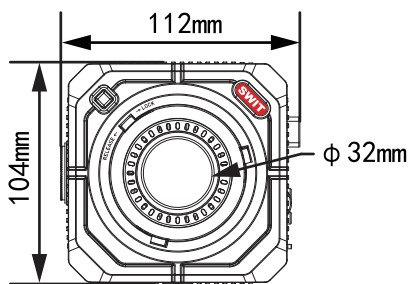


Figure 1 Front View

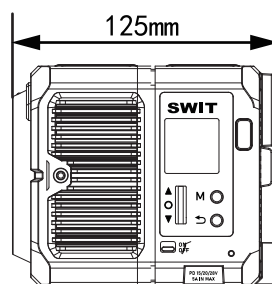


Figure 2 Right View

Photometric Data

Nominal CCT/K	Distance	Ev/Lux			
		MINI-150B (Bare Lamp)	MINI-150B (standard reflector)	MINI-150B(standard reflector + diffuser)	MINI-150B (Softbox)
2700	1m	4524	20428	1741	2442
	3m	548	2270	191	227
	5m	215	817	69	82
3200	1m	4701	21184	1814	2548
	3m	571	2354	200	237
	5m	223	847	72	85
4500	1m	5092	22787	1962	2767
	3m	621	2532	216	257
	5m	242	911	78	93
5600	1m	5336	24051	2048	2890
	3m	647	2672	226	268
	5m	253	962	81	96
6500	1m	5484	24362	2098	2971
	3m	666	2707	232	276
	5m	258	974	84	99

Notes:

- 1.The above photometric data were obtained under the condition of 150W total power consumption;
- 2.If the total power consumption, power supply conditions, or operating mode change, please refer to the actual operating status. The nominal values are for reference only under specific power consumption conditions.

Safety Precautions

- 1.Do not disassemble the fixture or touch internal components with metal objects to avoid permanent damage.
- 2.Store the fixture in dry, dust-free environments only; dust or moisture may cause malfunctions or hardware failure.
- 3.SWIT-brand USB-C adapters are recommended. If using third-party adapters, confirm full fast-charge protocol compatibility before use to prevent fixture damage.
- 4.Avoid using the adapter and battery at the same time;
- 5.Operate the fixture only within an ambient temperature range of -10°C ~ 40°C.
- 6.Remove the light source protective cover before use;
- 7.Keep the fixture away from flammable and explosive materials during operation.
- 8.Do not touch the front glass lens of the light source—risk of severe burns.
- 9.Avoid prolonged contact with metal lamp housing and adapter surfaces during operation, as they reach high temperatures.

Exterior Component Description

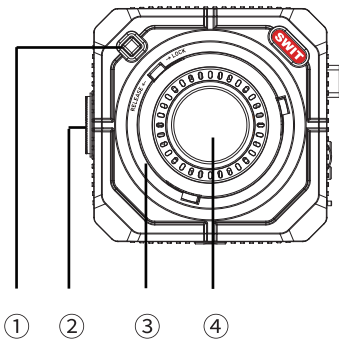


Figure 3 Front View

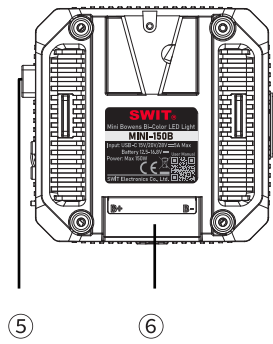


Figure 4 Rear View

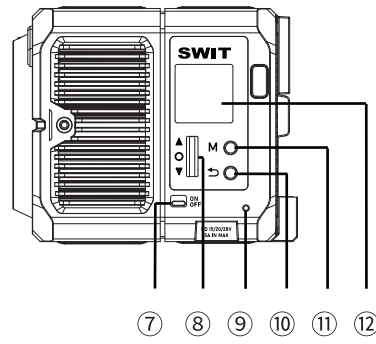


Figure 5 Right View

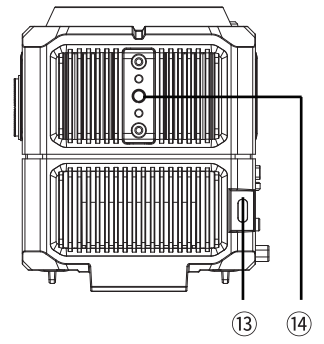


Figure 6 Bottom View

- | | |
|--|---------------------------|
| ① MINI Bowens mount release button | ⑧ Rotary encoder |
| ② Mounting hole for bracket | ⑨ Battery level indicator |
| ③ Accessory locking mechanism | ⑩ Back button |
| ④ Light source | ⑪ Menu button |
| ⑤ V-mount battery plate release switch | ⑫ LCD display |
| ⑥ V-mount battery plate | ⑬ USB-C port |
| ⑦ Power switch | ⑭ 1/4" screw hole |

Control Panel and Usage

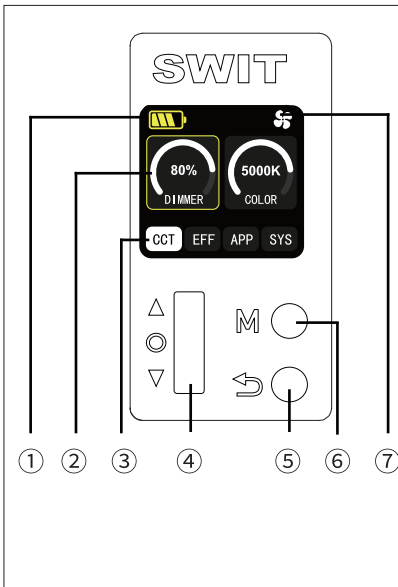


Figure 7 Control Panel

No.	Name	Function
①	Power source & battery indicator	1) : Adapter power 2) : Battery power & level: Full:100%, 3 bars: 75%~100% 2 bars: 50%~74% 1 bar: 25%~49% Empty: <25%
②	Display area	Shows parameters of current working mode
③	Main menu	Main menu list
④	Rotary encoder	1) Scroll up/down: select items, adjust parameters 2) Press: enter submenu, activate/exit current item
⑤	Back button	1) Return to previous menu 2) Long press: reset Bluetooth
⑥	M button	Switch main menu
⑦	Fan status indicator	1) : Fan ON 2) : Fan OFF

Table 1 Description of Each Component of the Control Panel

1.CCT Mode

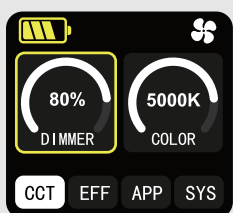


Figure 8 CCT Mode

No.	Parameter	Adjustment Range	Min. Step
1	DIMMER	0%-100%	1%
2	COLOR	2700K-6500K	50K

Table 2 Adjustable Parameters and Adjustment Ranges of [CCT] Mode

2.EFF Mode

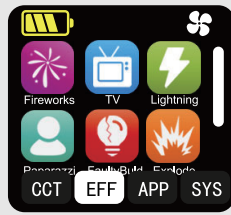


Figure 9 EFF Mode

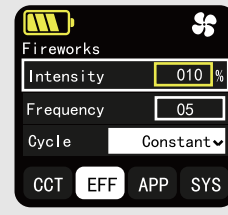


Figure 10 Detailed EFF Parameters

No.	Parameter	Adjustment Range	Min. Step
1	EFF	Fireworks, TV, Lightning, Paparazzi, Faulty Bulb, Explode, Bonfire, Welding, Color Temp Ring	/
2	Intensity	0%-100%	1%
3	Frequency	1-10	1
4	Cycle	Once, Constant, Stop	/

Table 3 Adjustable Parameters and Adjustment Range of [EFF] Mode

3.APP



Figure 11 Obtain the QR code of the APP

This product supports APP control. Customers can scan the QR code on the screen to obtain and download the APP.

4.SYS

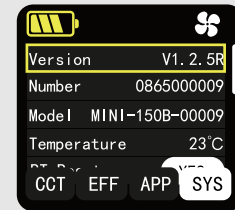


Figure 12 [SYS] Interface

No.	Item	Options	Description
1	Version	/	Display current firmware version
2	Number	/	Display hardware serial number
3	Model	MINI-150B-XXXXX	1. MINI-150B: Indicates the product model of this lamp 2. XXXXX: 1) Forms the complete Bluetooth name together with MINI-150B 2) "XXXXX" is the last five digits of the hardware number by default; 3) Renaming is supported. The specific operations are as follows: On this interface, select "Model", press the rotary encoder (Figure 7④), and rename the Bluetooth device as prompted. Naming rule: character length ≤ 5 , consisting of letters and numbers.
4	Temperature	/	Indicate the temperature of the current light source
5	BT Reset	YES, NO	When controlling light fixtures via the APP, if the APP malfunctions or fails to locate the target light fixture, users may try resetting the Bluetooth of the target light fixture so that the APP can rediscover it.
6	Update	YES, NO	See [Firmware Update] for details
7	Fan Mode	Auto, High, Medium, Low, Off	Set fan operation mode
8	Curve	Linear, Log., Exp., S-Curve	Set dimming curve
9	Mains Vo.	100-127V, 220-240V	Mains Voltage Selection. Note: Only valid for DC 28V/5A USB-C adapters
10	Batt. Mode	Continuous, Turbo	Operating mode when selecting battery power supply
11	Language	中文, English	System display language toggle
12	Reset	YES, NO	Restore all fixture settings to factory defaults
13	Factory	YES	Factory calibration menu, restricted from end-user access

Table 4 [SYS]Settings Interface

Firmware Update

1. Firmware Package Acquisition

Download official firmware files from SWIT website: <http://www.swit.cc>

2. Firmware Update Steps

- 1) Prepare an empty USB flash drive formatted with the FAT32 file system and a USB-C to USB-A adapter;
- 2) Place the firmware update package in the root directory of the USB flash drive;
- 3) Prepare a fully charged V-Mount battery with a continuous load output current greater than 10A to power the MINI-150B;
- 4) Turn on the power switch to put the MINI-150B into working state, and connect the USB flash drive to the MINI-150B effectively via a USB-C to USB adapter.
- 5) Press the rotary encoder (Figure 7 ④), and perform firmware update following the path: "SYS" → "Update" → "Yes".
- 6) Restart MINI-150B after the prompt indicates success, check the firmware version, and confirm whether the update is completed successfully:
 - Press the "M" key (Figure 7 ⑥), follow the path "SYS" → "Firmware Version" to check the device's firmware version. If the version number matches that of the update package, the firmware update is successful.
 - If the firmware update fails, please refer to [General Solutions for update Failures] for details.

3. General Solutions for update Failure

If the firmware update prompt fails, try the following two methods:

- 1) Press the back key (Figure 7 ⑤) to exit the current interface, and repeat Step 4 of [Firmware Update Steps] until the update succeeds;
- 2) Replace with a qualified USB flash drive, and repeat Step 2 to Step 5 of [Firmware Update Steps] until the update succeeds.

Note:

- 1. Do not power off or unplug the USB flash drive during the update process!!!**
- 2. The file system of the USB flash drive must be FAT32!!!**
- 3. Place the firmware update package in the root directory of the USB flash drive!!!**

Common Problems and Solutions

No.	Fault Phenomenon	Root Cause	Resolution
1	The LCD display of the luminaire works normally, yet there is no light output (Dimmer≠0%).	[Over-temperature Protection] If the temperature reading on the "SYS" interface is greater than 95°C, the NTC temperature is excessively high, exceeding the over-temperature protection temperature threshold, and the over-temperature protection function is triggered.	Restart the luminaire after the temperature drops below 85°C to restore light output.
2	The Dimmer parameter cannot be adjusted to 100%.	[Maximum Output Power Limitation] The Dimmer parameter cannot be adjusted to 100% under the following two scenarios: 1. Battery-powered Batt. Mode=Turbo, BAT voltage ≤13V, maximum output power is limited 2. FAN=OFF The maximum output power is limited to 30W	Normal design behavior, no hardware fault
3	The fan operating mode cannot be set to "Off".	Improper selection of input voltage, the input voltage of the complete lamp < DC 24V	Replace power supply unit with output voltage ≥ DC 24V
4	Abnormal luminaire behaviour when plugging and unplugging the adapter output terminal	[Adapter Does Not Support Fast-Charging Protocol] When the power switch of the MINI-150B light fixture is kept on, connecting a USB-C adapter that does not support the fast-charging protocol will cause damage to the MINI-150B.	1. Contact SWIT after-sales service for repair; 2. Please make sure to use an adapter that supports the fast-charging protocol before use.
5	Constant low-voltage warning with zero light output	Connect the adapter while running on battery power, and remove the power-supply battery without turning off the power switch	1. Unplug and replug the adapter, then power on the device again; 2. Try to avoid using it in such usage scenarios.
6	The battery is fully charged. However, when powered by this battery, the fixture continuously indicates low-voltage warning and no light output	1.Improper battery selection; 2.When the battery output capability is insufficient, it may cause the fixture to indicate low-voltage warning, resulting in failure to operate normally.	Use a battery with a continuous load output current no less than 10A for power supply.

Packing List

No.	Packing List		Quantity
1	Standard Packaging	MINI-150B (Including Light Source Protective Cover)	x 1
2		MINI Bowens Mount Standard Reflector + Diffuser	x 1
3		Bowens Mount Adapter (MINI to Standard Bowens Mount)	x 1
4		Tripod Adapter Base	x 1
5	Optional Accessories	USB-C Adapter (with 1.8m USB-C Power Cable)	/
6		45cm MINI Bowens Mount Quick Open Soft box with Eggcrate	