



MINI-150B Studio Spotlight

Ver: A

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

Model	MINI-150B
Color Temperature	2700K-6500K
Brightness	0% – 100% Note (battery power): When battery voltage \leq 13V, Max brightness limits: 1)Linear: 75% 2)Exponential: 90% 3)S curve: 60% 4)Logarithmic: 35%
Illuminance	See [Photometric Data] for details
CRI	98
TLCI	98
SSI(D55)	73
Half Beam Angle	Approx. 60° (MINI-150B) Approx. 32° (with MINI Bowens standard reflector)
Control Methods	Onboard control, APP
Dimming Curves	Linear, Exponential, Logarithmic, S curve
FAN	Auto, High, Midum, Low, OFF Note: Fan OFF only available when input voltage \geq DC 24V
Power Supply	Battery, USB-C adapter
Operating Voltage	1. USB C adapter: DC 15V/3A, 20V/3.25A, 28V/5A 2. Battery: DC 12.5V – 16.8V (continuous load \geq 10A) Note: USB C adapter must support fast charging protocols: PD2.0/PD3.0/PD3.1, Samsung AFC, Huawei, QC2.0/QC3.0, etc.
Power Consumption	1. Battery power: > 13V: Max approx. 150W \leq 13V: Max approx. 110W 2. USB C adapter: DC 15V: About 40W; DC 20V: About 50W;
Dimensions	See Fig.1, Fig.2
Weight	Approx. 1 kg (MINI -150B) Approx. 80 g (tripod adapter base) Approx. 55 g (MINI Bowens standard reflector) Approx. 98 g (MINI Bowens standard reflector + diffuser)

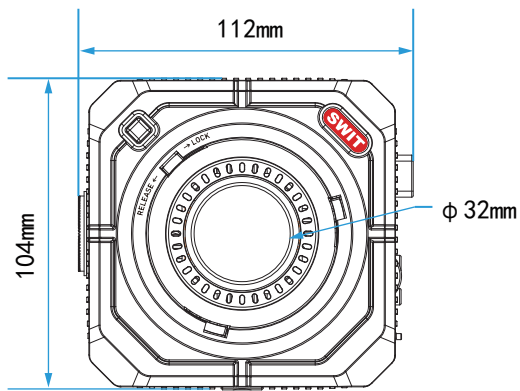


Figure 1 Front View

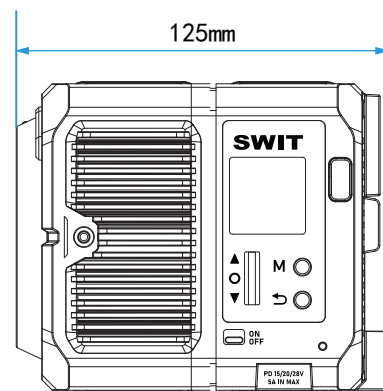


Figure 2 Right View

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	17228	1741	2442
	3m	548	1751	191	227
	5m	215	664	69	82
3200	1m	4701	17984	1814	2548
	3m	571	1829	200	237
	5m	223	693	72	85
4500	1m	5092	19587	1962	2767
	3m	621	1993	216	257
	5m	242	757	78	93
5600	1m	5336	20501	2048	2890
	3m	647	2087	226	268
	5m	253	791	81	96
6500	1m	5484	21162	2098	2971
	3m	666	2145	232	276
	5m	258	812	84	99

Warning

1. Do not disassemble the fixture or touch internal parts with metal objects to avoid damage.
2. Do not store the fixture in dusty or humid environments to prevent damage or malfunction.
3. When using a USB C adapter, confirm it supports required fast charging protocols to avoid damage to MINI-150B.
4. Operate only within temperature range: $-10^{\circ}\text{C} \sim +40^{\circ}\text{C}$.
5. Keep away from flammable and explosive materials during use.
6. Do not touch the front glass of the light source to prevent burns.

Parts Description

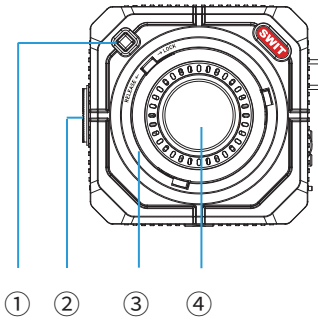


Figure 3 Front View

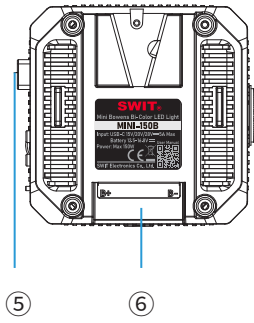


Figure 4 Rear View

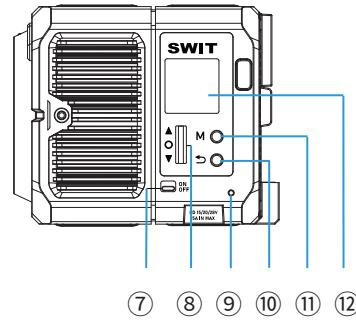


Figure 5 Right View

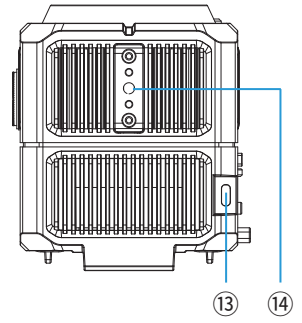


Figure 6 Top View

- ① MINI Bowers mount release button
- ② Mounting hole for bracket
- ③ Accessory locking mechanism
- ④ Light source

- ⑤ V mount battery plate release switch
- ⑥ V mount battery plate

- ⑦ Power switch
- ⑧ Rotary encoder
- ⑨ Battery level indicator
- ⑩ Back button

- ⑪ Menu button
- ⑫ LCD display
- ⑬ USB C port
- ⑭ 1/4" screw hole

Control Panel & Operation

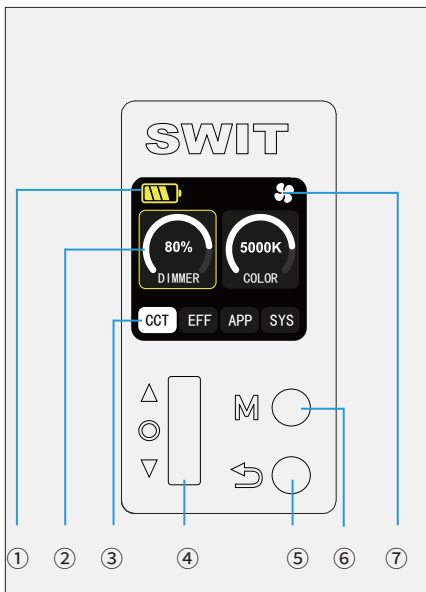


Figure 7 Control Panel

No.	Name	Function
①	Power source & battery indicator	1) :Adapter power 2) : Battery power & level: Full: Remaining power 100%, 3 bars: Remaining power ≥75%, 2 bars: Remaining power ≥50%, 1 bar: Remaining power ≥25%, Empty: Remaining power <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

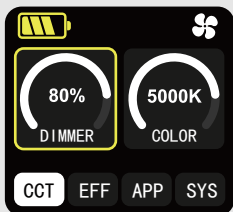


Figure 8 CCT Mode

No.	Parameter	Adjustment Range	Min. Step
1	Brightness	0%-100%	1%
2	Color Temperature	2700K-6500K	50K

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

2.EFF (Scene Effect) Mode



Figure 9 EFF Mode

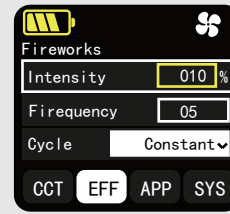


Figure 10 Details of EFF Parameters

No.	Parameter	Adjustment Range	Min. Step
1	Scene	Fireworks, TV, Lightning, Paparazzi, Bad Bulb, Explosion, Fire, Welding, CCT Cycle	/
2	Brightness	0%-100%	1%
3	Frequency	1-10	1
4	Cycle	Once, Continuous, Stop	/

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

3.APP Download



Figure 11 Obtain the APP QR Code

Search **SWIT Console** in iOS App Store / Google Play, or scan the on screen QR code to download APK.

4.SYS

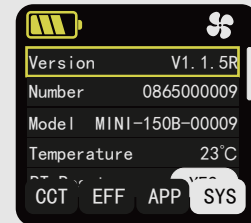


Figure 12 [SYS] Interface

No.	Item	Options	Description
1	Firmware Version	/	Display current firmware version
2	Serial No.	/	Display hardware serial number
3	Model	MINI-150B-XXXXX	1.MINI-150B:Refers to the product model of this lamp 2.XXXXX: 1)Form a complete Bluetooth name together with MINI-150B 2)"XXXXX" defaults to the last five digits of the hardware number; 3)Supports renaming. The specific operation is as follows: On this interface, select "Model", press the rotary encoder (Figure 7 ④), and rename the Bluetooth device as prompted. Naming rules: character length ≤ 5, consisting of letters and numbers only.
4	Temperature	/	Light source temperature
5	Bluetooth Reset	Yes / No	Reset if APP cannot find or control the light
6	Update	Yes / No	See [Firmware Upgrade] for details
7	Fan Mode	Auto/ High/Mid/Low/ OFF	1. Set the fan operation mode; 2. The fan's "Off" mode is limited by the input voltage and cannot be selected under certain conditions. Details are as follows: ▶ This mode is enabled when the input voltage is higher than 24V. The maximum overall power consumption of the device is approximately 58W. The maximum values of brightness parameters are as follows: Linear 42%, Exponential 71%, Logarithmic 15%, S-curve 47%; ▶ If the input voltage ≤ 24V, this mode cannot be set, and it will automatically switch to AUTO mode after selecting "Off".
8	Dimming Curve	Linear, Log., Exp., S Curve	Select dimming response
9	Language	Chinese / English	UI language
10	System Reset	Yes / No	Restore factory defaults
11	Factory Menu	Yes	Not accessible to users

Table 4 [SYS] Settings Interface

Firmware Upgrade

1. Acquisition of Program Upgrade Package

Access Channels: <http://www.swit.cc>

2. Firmware Upgrade 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 upgrade package in the root directory of the USB flash drive;
- 3) 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.
- 4) Press the rotary encoder (Figure 7 ④), and perform firmware upgrade following the path: "SYS" → "Upgrade" → "Yes".
- 5) Restart MINI-150B after the prompt indicates success, check the firmware version, and confirm whether the upgrade 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 upgrade package, the firmware upgrade is successful.
 - ▶ If the firmware upgrade fails, please refer to **[General Solutions for Upgrade Failures]** for details.

3. General Solutions for Upgrade Failure

If the firmware upgrade 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 Upgrade Steps]** until the upgrade succeeds;
- 2) Replace with a qualified USB flash drive, and repeat Step 2 to Step 5 of **[Firmware Upgrade Steps]** until the upgrade succeeds.

Note:

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

Frequently Asked Questions and Solutions

No.	Detailed Description of Frequently Asked Questions	Causes of the Problem	General solution
1	The LCD display of the lamp is normal, but there is no light output (Dimmer ≠ 0%).	[Over-temperature Protection] If the temperature displayed on the "SYS" interface is higher than 95°C, it indicates that the NTC temperature is excessively high, exceeding the over-temperature protection temperature threshold and triggering the over-temperature protection function.	Restart the lamp after the temperature drops below 85°C, and the light output will be restored.
2	The brightness parameter cannot be adjusted to 100%.	[Low Battery, Maximum Output Power Limited] When powered by the battery, if the battery voltage is $\leq 13V$, the maximum output power of the entire device will be limited. The upper limit of brightness parameters under each dimming curve condition is as follows: 1) Linear dimming curve: 75%; 2) Exponential dimming curve: 90%; 3) "S" dimming curve: 60%; 4) Logarithmic dimming curve: 35%.	Replace the battery with an appropriate power level
3	The fan operating mode cannot be set to "Off".	Improper selection of input voltage, the input voltage of the whole lamp $\leq DC 24V$	Change the power supply mode with output voltage $> DC24V$
4	There is a burnt smell when plugging and unplugging the output terminal.	[Adapter Does Not Support Fast Charging Protocol] When the light body switch of MINI-150B 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 maintenance service; 2. Please make sure to use an adapter that supports the fast charging protocol before use.

Packing List

No.	Packing List	Quantity
1	MINI-150B (Including Light Source Protective Cover)	x 1
2	MINI Bowens Mount Standard Reflector + Soft Diffuser Cover	x 1
3	Bowens Mount Adapter (MINI Buckle to Bowens Mount)	x 1
4	Tripod Conversion Adapter Base	x 1
5	USB-C Adapter (with 1.8m USB-C Power Cable)	Customers can select and configure according to their own needs
6	45cm MINI Bowens Mount Deep Parabolic Softbox	