MAJOR TECH

INSTRUCTION MANUAL

SFC RANGE

SOLAR PIR TRICOLOUR SECURITY LIGHT

Contents

1. INTRODUCTION

The SFC Range offers high-performance solar security lighting with a powerful light output of up to 4800 lumens and selectable Tricolour CCT (3000K / 4000K / 6500K). Designed for outdoor use, all models are IP65 rated for protection against dust, water and harsh weather. Each SFC security light includes a built-in PIR motion sensor and features adjustable brightness modes. In PIR mode, the light output remains at 10% brightness and immediately increases to 400% when motion is detected balancing improved light output for security and peace of mind with outstanding battery performance. Settings such as timed control, lighting modes, and colour temperature can be adjusted using the included remote, to suit a wide variety of applications and preferences. Installation is straightforward with adjustable light and solar panel brackets, and a 2-meter solar panel cable offering flexible placement options.

General Information:
- During daylight hours, the solar panel converts sunlight into electrical energy, which is stored in the internal battery.
- At night, the built-in light sensor automatically switches the light on.
- Illumination duration will vary depending on installation location, weather conditions, and seasonal daylight hours.

First Use and Activation:
- If any damage is noticed upon removing the product from the packaging, please return it to Major Tech before attempting installation.
- This light must be installed by a competent installer. If the light is incorrectly installed Major Tech reserves the right to refuse the return of the product.
- Although the battery is pre-charged, its power level may decrease during storage and shipping. For optimal performance, allow the light to charge for a total of 12 hours.
- If the light is turned off via the remote control and remains uncharged for more than 48 hours, it will enter a protective sleep mode.
- To exit this mode, connect the light to the solar panel and allow it to charge.

N.B: To protect the battery from over-discharge, the light is shipped deactivated. Press and hold the power button on the bottom of the light for 2 seconds to activate it. After activation, this button functions as a manual On/Off switch. See below for button location.
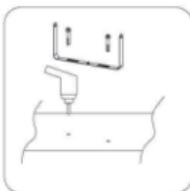

Power Button
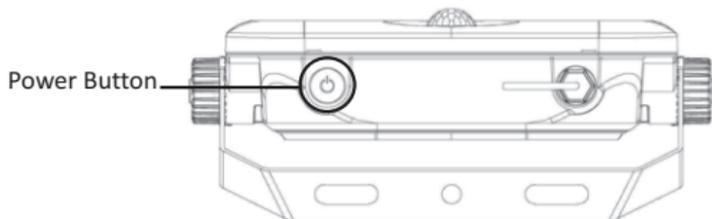
2. INSTALLATION

NOTE:
- Install the light in an outdoor area with full, direct sunlight for at least 6 hours per day to ensure proper charging.
- Shaded areas will reduce battery charging and shorten illumination duration.
- Avoid locations near strong artificial lighting, such as street lights, which may prevent the light from switching on.
- For optimal performance, position the solar panel facing south by west, with an inclination of approximately 30°.
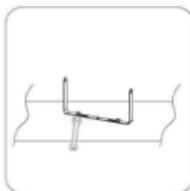
2.1. Installation Steps

1. Remove the light's mounting bracket.
2. Select suitable locations for both the light and solar panel. Using each bracket as a template, mark and drill two mounting holes for each bracket. **Fig. 1**
3. Insert screw plugs for the solar panel and expansion bolt sleeves for the light into the drilled holes.
4. Secure each bracket: use the included screws for the solar panel bracket and expansion bolts for the light bracket. **Fig. 2**
5. Mount the light onto its bracket, adjust the angle using the screw caps, and tighten the hex bolts. **Fig. 3 & Fig. 6**
6. Mount the solar panel onto its bracket, adjust to the desired angle, and secure with the supplied wing nuts and screws. **Fig. 4 & Fig. 6**
7. Connect the solar panel output cable to the light's input cable, ensuring the gland is tightened to maintain the IP rating. **Fig. 5**
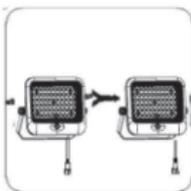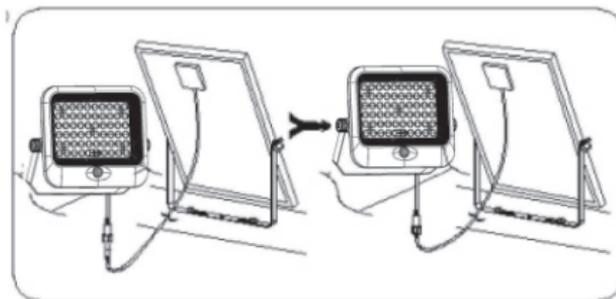
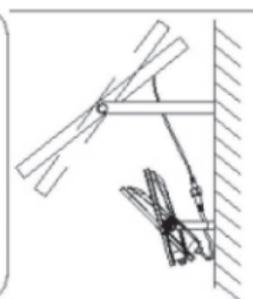| Fig. 1	Fig. 2	Fig. 3	Fig. 4

Fig. 5	Fig. 6

3. REMOTE CONTROL
3.1. Remote Control Layout

Turn On/ Cancel Permanent Off	ON	Turn Off / Permanent Off	OFF
High Brightness Mode	☀	PIR Motion Sensor Mode	·))
3-Hour Timer Mode	3H	Tricolour CCT Mode	CW/WW
6-Hour Timer Mode	6H	Auto Discharge Mode	AUTO
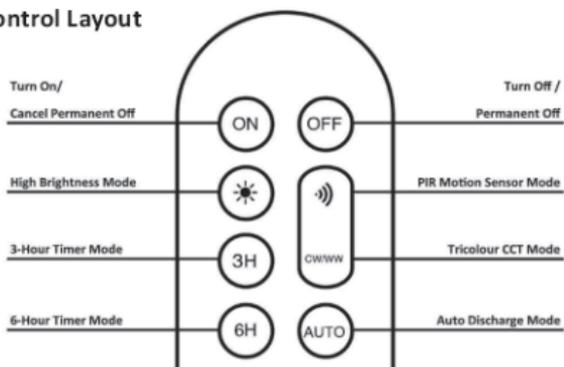
3.2. Remote Control Functions

Key	Function	Validity	Valid Conditions	Detailed Description of Function
ON	Turn On	Single use (no memory)	Day and night	Turns the light on at 100% brightness. Brightness will gradually dim over 12- 14 hours until the light switches off
	Cancel Permanent Off	Single use (no memory)	Day and night	When the light is in Permanent Off mode, pressing this button cancels it
OFF	Turn Off	Single use (no memory)	Day and night	Press once to turn the light off
	Permanent Off	With memory	Day and night	Hold for 3 seconds to activate Permanent Off mode - the light will remain off but the battery will still charge. To turn the light back on, press **ON**
☀	High Brightness Mode	Single use (no memory)	Day and night	While the light is on press to increase brightness to 160%, with no gradual dimming. In this mode the battery will last for a maximum of 3 hours
·))	PIR Motion Sensor Mode	With memory	Night only	Activates PIR motion sensor mode. Light stays at 10% brightness when idle, and increases to 400% brightness when motion is detected
3H	3-Hour Timer Mode	With memory	Night only	Light starts at 144% brightness and gradually dims until it turns off after 3 hours
CW/ WW	Tri colour CCT Mode	With memory	Night only	Cycles between 3 colour temperatures: - 6500K (Cool White) - 3000K (Warm White) - 4000K (Natural White)
6H	6-Hour Timer Mode	With memory	Night only	Light starts at 115% brightness and gradually dims until it turns off after 6 hours
AUTO	Auto Discharge Mode	With memory	Night only	Light starts at 100% brightness and gradually dims over 12- 14 hours until it turns off

4. INSTRUCTIONS FOR USE
4.1. Default Time Delay
The PIR sensor's time delay is 20 seconds. This is how long the light will remain at full brightness for once no motion is detected. If the light is at full brightness it refreshes each time motion is detected.

4.2. Mode Indicator Light
If the indicator light is:
- **Red light flashing:** The battery is currently charging
- **Red light solid:** PIR Motion Sensor Mode Active
- **Red light off:** Time Control Mode Active

4.3. General
- **Remote Control:** Ensure batteries are installed before first use. Do not lose the remote control as functionality will be limited.
- **Mode Selection:** Use the remote control to set the light to the desired mode.
- **Memory:** Permanent Off, PIR, Time Control, CCT and AUTO Modes are stored in memory. Each time the light turns on automatically, it will turn on in the last Mode set.
- **Assembly:** Install the light according to the instructions on **page 5**.
- **Seasonal and Weather Impact:** During autumn, winter, or continuous cloudy and rainy days, the charging efficiency may decrease, leading to shorter discharge times. This is normal and is to be expected in such conditions.

5. MAINTENANCE AND DISPOSAL
- Please do not throw this light away with normal refuse. It contains a battery which should be recycled .
- This light must never be placed into a fire, the battery poses an explosion risk.
- Please do not attempt to connect this light to an AC power supply.
- Please install securely, and properly fasten the mounting brackets, solar panel and light to prevent injuries resulting from the fittings falling.
- In order for the Solar Panel to continue to work at peak efficiency, please ensure it is cleaned with a damp cloth and water every 3-4 months or as needed.
- Avoid installing this light near air-condioners, heaters, hot machinery, or high-voltage power grid systems, which could interfere with the PIR Sensor.

6. SPECIFICATIONS

Function	Model	
	SFC-50T	**SFC-150T**
Lumen Rating	1600lm	4800lm
LED Power	12.8W	38.4W
Lumen / Watt	125lm/W	125lm/W
Solar Panel Power	8W/5V	16W/5V
Battery Specification	3.2V 5,000mAh	3.2V 15,000mAh
Battery Type	LiFePO4	LiFePO4
Dimensions		
Lamp	232 x 175 x60mm	280 x 215 x 60mm
Solar Panel	271 x 180 x 15mm	350 x350 x 15mm
Weight		
Lamp	630g	1.03kg
Solar Panel	500g	870g
LED Type	SMD 5730	
CCT	Tri-colour (6500K / 4000K / 3000K)	
Charging Time	4 - 6 hours @ >40 000lux (Normal Daylight)	
Discharge Time	>12 hours (Auto Mode after Full Charge)	
No. of Charge Cycles	>1200 cycles (80% Nominal Capacity)	
Lighting Modes	On, Off, Auto, 160% Brightness, PIR, Time, 3x CCT	
Day/Night Detection	Auto: Day >10lux / Night <5-10lux	
Installation Height	3 - 6 meters	
Detection Distance	6-8 meters @25°C Ambient Temperature	
Detection Beam Angle	120°	
Material:		
Lamp Body	Black ABS and PC Lens	
Solar Panel	Monocrystalline Silicon and Glass	
Mounting Brackets	Powder Coated Iron	
IP Rating	IP65	
Operating Temperature & Humidity	Charge >5°C , Discharge >-10°C @<95% RH	
Remote Control Battery Type	2 x 1.5V AAA	
Warranty	Limited - 2 year	
Standards	AS CISPR 15:2017, AS/NZS CISPR 15:2011	
Approvals	C-Tick	

MAJOR TECH (PTY) LTD

South Africa

🌐 www.major-tech.com

✉ sales@major-tech.com

Australia

🌐 www.majortech.com.au

✉ info@majortech.com.au

CE ♻ 🗑