

# Smart GUARD



User Manual

***AEC-931BSD-SP8  
Smartguard Motion Sensor LED  
Light with Video Camera***

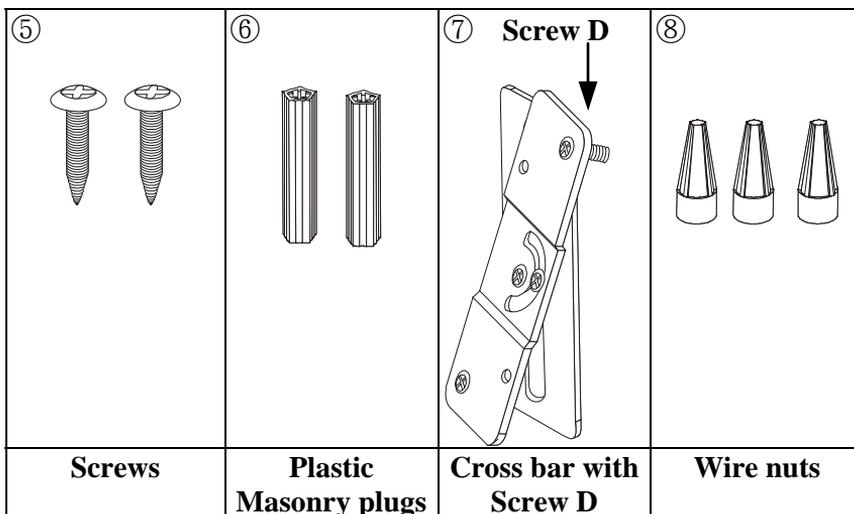
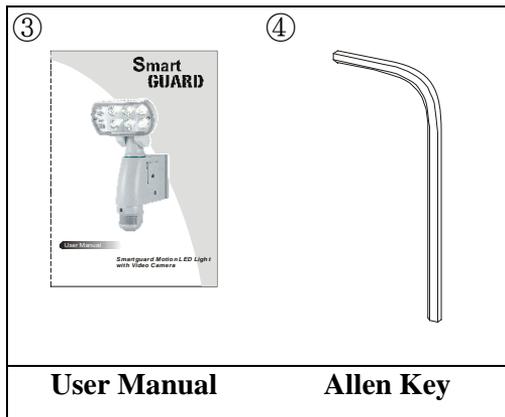
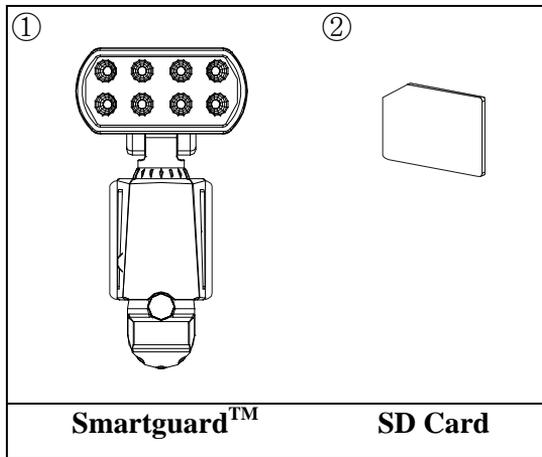
# Table of contents

1. Contents of package .....	Page 1
2. Smartguard™ Motion Light with Video Camera .....	Page 3
3. Assembly .....	Page 3
4. Installation .....	Page 4
5. Programming your Smartguard™ .....	Page 7
6. Set the date and time of Smartguard™ .....	Page 9
7. Viewing video.....	Page 10
8. Technical Specifications .....	Page 11
9. General Information and Safety.....	Page 12
10. FAQ (Frequently Asked Questions) Section .....	Page 13

## Contents of packaging

- Smartguard™ Motion Light with Video Camera
- User Manual
- 1 Allen key
- SD card
- Accessory bag: 2pcs screws, 2pcs plastic masonry plugs, wall mount (cross bar), 3pcs wire nuts

(User manual and Allen key are kept in one zip bag, please keep these accessories. )



# Smartguard™ Motion Light with Video Camera overview

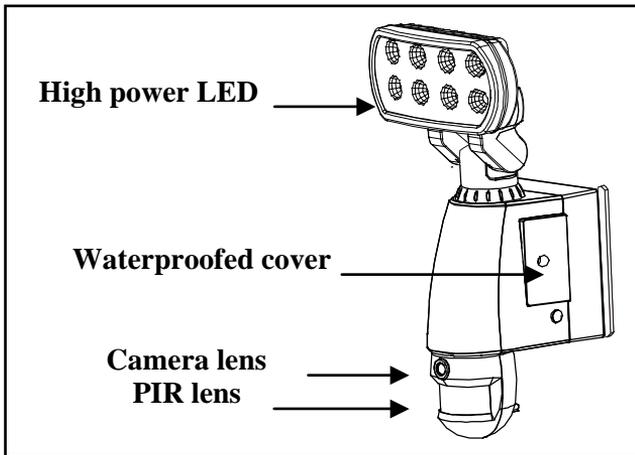


Fig. 1

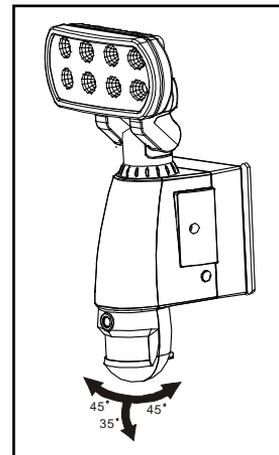


Fig. 2

## ***Step 1. Insert/remove SD card (see fig. 3):***

- Unscrew the waterproofed cover using provided Allen key (part no. ④), then insert the SD card until it automatically locks into place.
- If you need to remove the SD card, please press OFF button and take it out within 30 seconds.
- When LED light turns green, meaning SD card is being read, do not remove SD card or data may be lost.
- To remove SD card, push in SD card once to eject, then pull out.

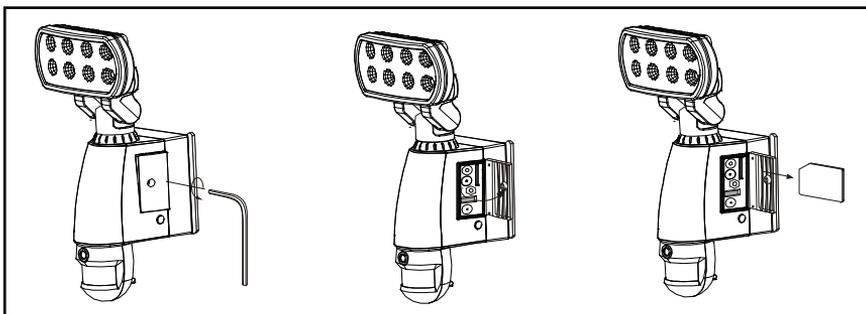


Fig. 3

## Step 2. Installing the Smartguard™ Motion Light with Video Camera

### IMPORTANT

IF IN ANY DOUBT ABOUT THE INSTALLATION OF THIS PRODUCT, CONSULT A QUALIFIED ELECTRICIAN

- This product must be grounded
- Do not mount the unit against inflammable surfaces
- The motion detector will not operate correctly if it is installed:
  - ① Near the outlet of a central heating boiler
  - ② Near air conditioning plant
  - ③ Pointing directly at moving vehicles
  - ④ Within sight of reflections from moving water
  - ⑤ Where other lamps could shine on the detector

BEFORE ATTEMPTING ANY INSTALLATION OR MAINTENANCE, ENSURE THAT THE ELECTRICAL SUPPLY IS SWITCHED OFF AND THE CIRCUIT FUSES REMOVED OR THE CIRCUIT BREAKER IS IN THE OFF POSITION.

Please make sure the voltage and polarity are correct before connection. Incorrect voltage may cause electric shock. If you are not sure, please contact your retailer.

**Note: It is recommend to mount Smartguard™ Motion Light with Video Camera 6 – 7ft above the ground for optimum performance, do not mount the fixture below 3.94ft. See below figure for details of performance range.**

Detection range: 32.8ft x 180° (see fig. 4)

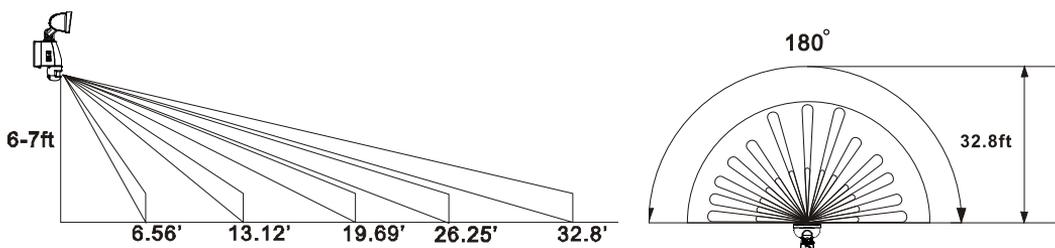


Fig. 4

## Installation to a junction box using crossbar mount (see fig. 5 & fig. 6):

1. Attach the crossbar (part no. ⑦) to junction box and fix by screw C.
2. Feed the cable through the back mounting plate.
3. Fix the mounting plate to crossbar (part no. ⑦) by screw D
4. Connect the black wire (live wire) from the AC power cord to the single black wire coming from Smartguard™ using one of the supplied wire nuts (part no. ⑧).
5. Connect the white wire from the AC power cord to the white wire coming from Smartguard™ using one of the supplied wire nuts (part no. ⑧).
6. Connect the green/yellow wire from the AC power cord to the green/yellow wire coming from Smartguard™ using one of the supplied wire nuts (part no. ⑧).
7. Make sure the polarity is correct.
8. Attach the unit to the mounting plate. You will first need to angle the unit back so that the catch at the top of the mounting plate fits into slot on the back of the unit. Next lower the unit until holes at the bottom of the mounting plate and unit are flush. Then screw (screw A) into this hole, tightening carefully.

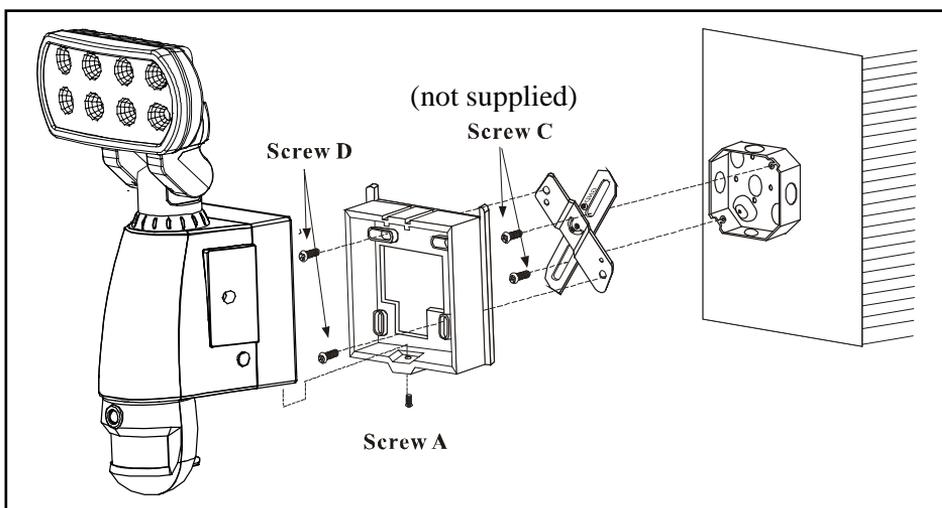
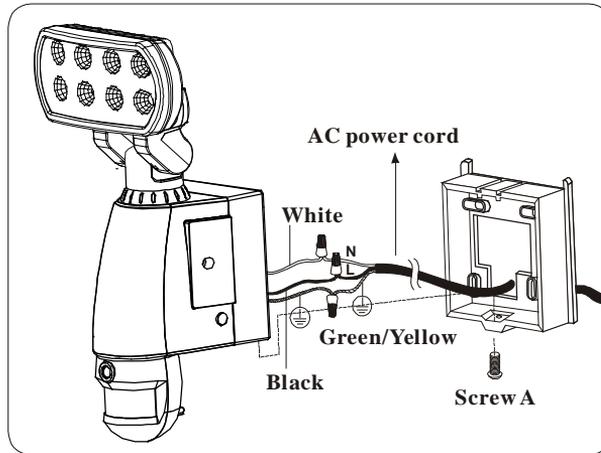


Fig. 5



**Fig. 6**

## **Installing your Smartguard™ Motion Light with Video Camera on surface without a junction box. (see fig. 6 & fig. 7)**

1. Place plastic masonry plugs (part no. ⑥) into desired surface aligning holes as shown below. Using an electric screwdriver, fasten mounting plate directly to surface using screws E (part no. ⑤).
2. Feed the cable through the back mounting plate.
3. Connect the black wire (live wire) from the AC power cord to the single black wire coming from Smartguard using one of the supplied wire nuts (part no. ⑧).
4. Connect the white wire from the AC power cord to the white wire coming from Smartguard using one of the supplied wire nuts (part no. ⑧).
5. Connect the green/yellow wire from the AC power cord to the green/yellow wire coming from Smartguard using one of the supplied wire nuts (part no. ⑧).
6. Make sure the polarity is correct.
7. Attach the unit to the mounting plate. You will first need to angle the unit back so that the catch at the top of the mounting plate fits into slot on the back of the unit. Next lower the unit until holes at the bottom of the mounting plate and unit are flush. Then screw (screw A) into this hole, tightening carefully.

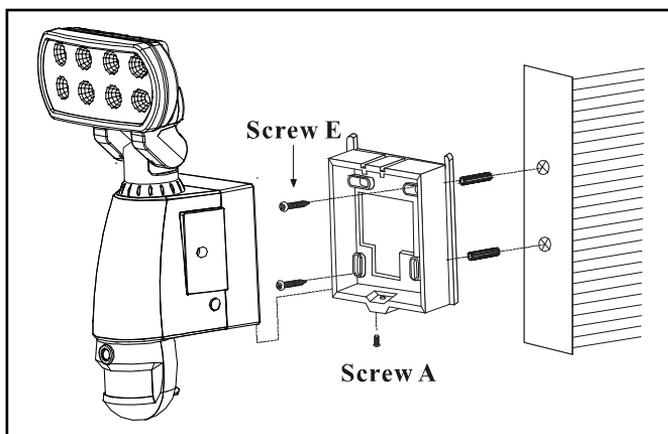


Fig. 7

**Please allow 1 minute warm-up time after switching on.**

**\* Push the RESET button after switching on.**

**Remove plastic lens cover from camera after installation.**  
(see fig. 8)

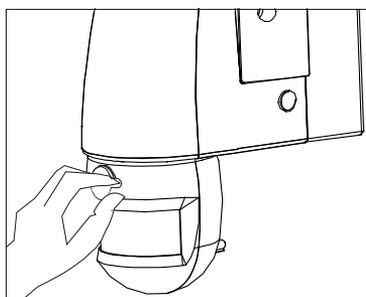


Fig. 8

### ***Step 3. Adjusting the Settings (see fig. 9~11)***

- **Time control** : Turn the time control knob to “+” side to increase the illumination time (7 minutes max.), turn the control knob to “-” side to reduce the illumination time (30 seconds min.).

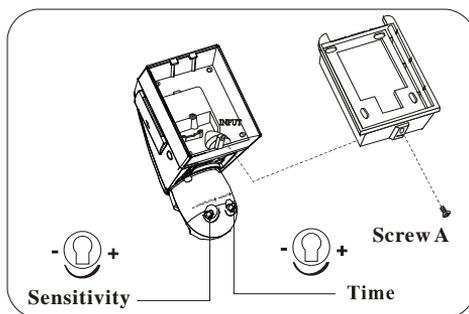


Fig. 9

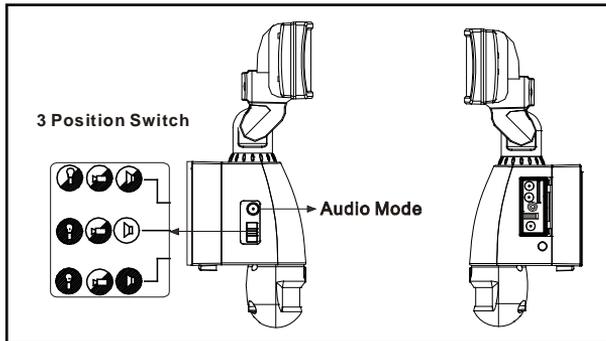
- **Sensitivity control** : Adjust the detector range of Passive Infrared Motion Sensor ( $\pm 6.56\text{ft} \sim 32.8\text{ft}$ )
  
- **Selecting working mode:**
  - Mode 1: Suggested setting when out of town**
    - Light + camera + speaker: all day detection
    - Daytime and nighttime: light, camera and speaker are all in operation
  - Mode 2: Suggested for day to day use**
    - Light at night + camera all day + speaker in the daytime
    - Daytime: light is off, camera is on, speaker is on
    - Nighttime: light is on, camera is on, speaker is off
  - Mode 3: Perfect for a place of business**
    - Light at night + camera all day + speaker at night
    - Daytime: light is off, camera is on, speaker is off
    - Nighttime: light is on, camera is on, speaker is on
  
- **Audio mode:** for selecting which audio message will play when motion sensor detects movement.
  - Pre-set default is “You are trespassing”
  - Push one time for “Warning! You are being videotaped by a security camera”
  - Push again for “dog barking”
  - Push one more time to turn off this function
  
- **LED indicator** : for indicating the function status of the unit by different color LED lights.
  - 1) Red : SD card is not inserted into the SD slot or the system is malfunctioning. Please turn off and on the main power supply to the unit if the system is malfunctioning.
  - 2) Green : The unit is recording or USB is inserted.
  - 3) LED off: stand by ( SD card is inserted into the slot ) , when off/record button is pressed
  - 4) Flash green LED : SD card is full

\* Usually SD card has override function, but if the user doesn't

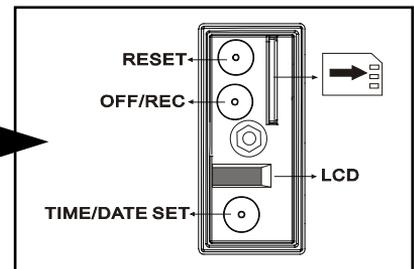
reset the date/time after power failure, the setting will return to default and lead to limited space for saving files.

\* Backup power for reserving date/time setting for at least 1 to 3 days during power outage.

\* Please note when off/record button is pressed, remove SD card within 30 seconds (now the LED will turn red after SD card is removed from the slot)



**Fig. 10**



**Fig. 11**

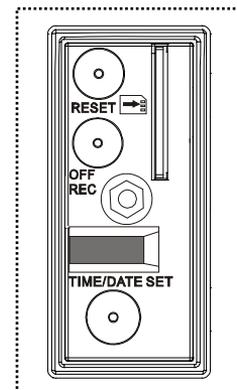
- **Reset button** : restore functions to default settings
  - 1) Press RESET button once each time you turn on unit.
  - 2) Please press this button in case of system malfunction.
  
- **Off/Rec** : Please press OFF/REC button to remove SD card. Please remove card within 30 seconds of pressing the OFF/REC button to avoid loss of data.

### ***Step 4. Set the Date and Time :***

**This will allow the security video taken by Smartguard™ to display the correct date and time it was taken.**

1. Push TIME/DATE SET button (see fig. 13) for 3 seconds. The LCD screen will then flash 3 times, indicating you have entered Time/Date setting mode.

1. **“YEAR”setting** : ”Y” and “08” are displayed



**Fig. 13**

on the screen; push the button to set year from “08-99”, push the button again and hold for 3 seconds to scroll through numbers quickly. If you have not pressed the button for 3 seconds, it will automatically save the year and go on to allow you to set the month.

2. Repeat the same setting procedure for **MONTH/DATE/HOUR/MINUTE**.
3. **“VIDEO/PHOTO” setting** : when entering this mode, these two icons   and “V” appear on the screen ; push the button to choose ”V” ( Video ) or ”P” ( Photo ) . If you have not pushed any buttons for 3 second, “OK” will appear on the screen, indicating it has automatically saved the current settings. The LCD screen will shut off automatically 10 seconds later.

\* On the ”P” (photo) setting, SmartGuard will take a series of digital photographs at a rate of 1-3 photos every second when the motion sensor is triggered

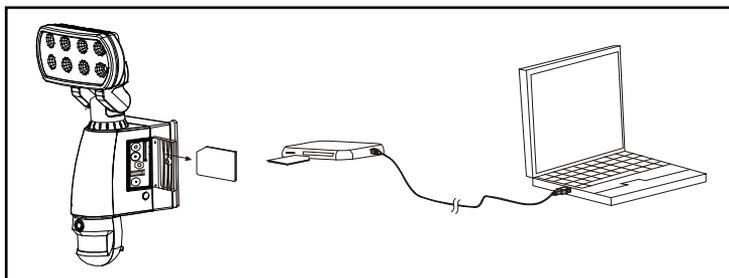
①		Start	②		YEAR Setting
③		MONTH Setting	④		DATE Setting
⑤		HOUR Setting	⑥		MINUTE Setting
⑦		VIDEO/PHOTO Setting	⑧		Finish

## Step 5. Viewing video

### 1. Viewing image by computer through a card reader (see fig. 14)

- Open the waterproofed cover on the Smartguard™ Motion Light with Video Camera
- Press OFF/REC button and remove SD card from the slot.

- Put the SD card into a card reader, connect card reader to computer, and open any media player to view the video.



**Fig. 14**

## **Technical Specifications**

### **1. Features and specification :**

- PIR detection angle 180 Deg and detection range up to 32.8ft
- Records 20 seconds image recording for image stream:  
15fps at 640\*480 Pixels
- Built in SD card slot for SD memory card
- SD card slot for additional storage, max memory size up to 64GB
- SD card spec.: FAT16 (SD) 、FAT32 (SDHC)
- Automatic exposure control, white balance and sharpness
- Auto Date & Time stamp
- Effective viewing angle : 60 deg
- Effective viewing distance: 26.24 feet
- Image format: JPEG AVI File
- Powered by AC 100V to 240V ( subject to requirement )
- Auto light sensor.
- Sensitivity control
- Floodlight time delay control
- Product measurements : (L) 160 x (W)160 x (H)300mm  
Weight: 1.1kgs

# General Information and safety

## Special care instructions!!!

- The Smartguard™ Motion Light with Video Camera is designed to be weather resistant. Never attempt to immerse the unit in water or any other liquid. This will damage the unit and void the warranty.
- This product is designed to illuminate and video. It will not prevent the commission of any act, legal or illegal. The manufacturer assumes no liability for any damage to property, injury to person, or death.
- Use a soft lens cloth for cleaning lens. Avoid touching lens with fingers.
- Remove dirt or stains with a soft cloth dampened with water or neutral detergent. Keep the Smartguard™ Motion Light with Video Camera in a dry and cool dust-free environment or container when it is NOT used
- Do not open the Smartguard™ Motion Light with Video Camera for unauthorized service. This could cause serious damage to the unit and will void the warranty.
- This Smartguard™ Motion Light with Video Camera is a precision electronic device. Do not attempt to service this camera yourself, as opening or removing covers may expose you to the danger of electric shock or other risks.
- To avoid risk of burns due to high temperature do not touch the floodlight when it is turned on.

# FAQ (Frequently Asked Questions) Section

## Q. How many pictures does the SD card hold?

A: The number of video files that amount to 1GB varies, as the size in bytes of each 20-second video clip will vary depending on the amount of brightness, color, and movement in each video clip. The clips typically vary from 2MB to 8MB.

SD Card	File Size	Q'ty of File(approx.)
1G	2Mb	500
1G	8Mb	125
2G	2Mb	1000
2G	8Mb	250
64G	2Mb	32000
64G	8Mb	8000

## Q. What happens when the card is full?

A: SmartGuard™ will automatically return to the oldest file and save over it each time a new video clip is stored. That means you don't have to take out the SD card unless you wish to review or save the video files.

## Q. Can I transfer pictures from the camera via cable?

A: No, you can't. If your computer has an SD card slot, you may insert the SD card directly into the computer and access the files by going to My Computer and opening the removable for the SD card, which should appear when you insert the card. See Step 6 "Viewing video" in your instruction manual for details. If you don't have an SD card slot, you may purchase an SD card reader from any retailer that sells electronics. Once you have an SD card reader, simply insert the card into the reader and attach the reader to your computer using a USB slot (not included in this packaging), and access the data the same way as explained above.

## Q. Can I view a live image of what the camera sees?

A: No, you can't. There is no USB port available with SmartGuard™.