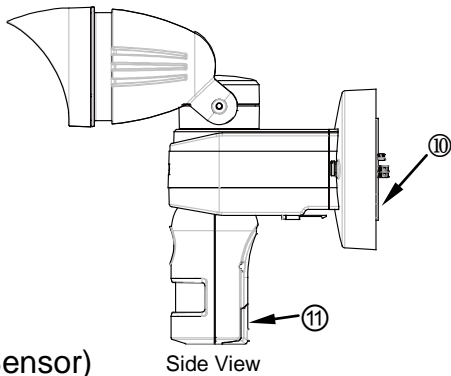
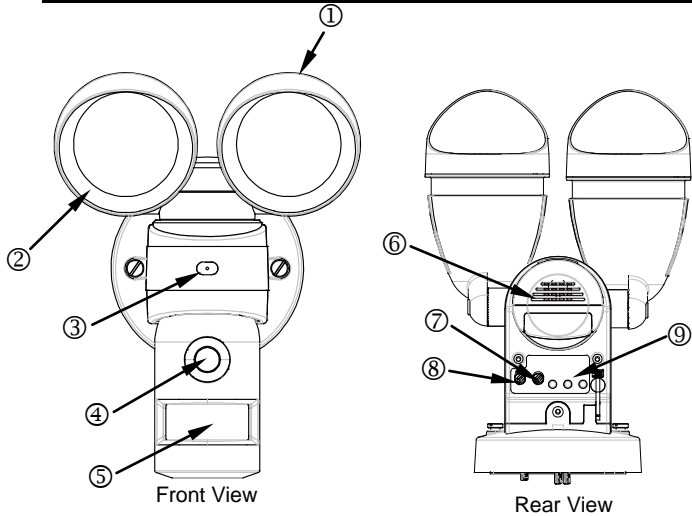


**SUNFORCE®**

**Motion Activated Dual Light & Video Camera**



- ① Floodlight
- ② Lampshade
- ③ Microphone
- ④ Camera
- ⑤ PIR (Motion Sensor)
- ⑥ Warning Speaker
- ⑦ Lux Control Knob
- ⑧ Time Control Knob (PIR trigger time)
- ⑨ LCD control panel and Setting buttons
- ⑩ Battery Cover
- ⑪ SD Card Slot

**PACKAGE CONTENTS**

Please check your box carefully and confirm the contents listed below are included.

No.	Item	Qty
1	Base Unit (model 82346)	1
2	AA Size 1.5V Alkaline Battery	4
3	2GB SD Card	1
4	Screw Pack	1
5	Halogen Bulb	2
6	Operating Instruction Manual	1

**INTRODUCTION**

Your Motion Activated Dual Light & Video Camera is a unique surveillance system for your home or business. At night, the built-in passive infrared (PIR) motion sensor turns on the light when it detects motion in its coverage area, so that camera images can be clearly seen. During the day, the built-in photocell sensor saves electricity by automatically deactivating the light. Your unit comes with a built-in SD card slot for additional storage; accepts memory storage up to 32GB. Customized sound recording is also available.

The Motion Activated Dual Light & Video Camera is designed for indoor/outdoor use and your unit can be controlled by remote control.

**Note:** Read this entire manual before installation

**BEFORE START**

Please follow the steps below for installation;

**NOTE:** The alkaline batteries function unit settings only. Do NOT install the batteries until you're ready to set the functions and mount the unit. The battery power will last about 1 hour after installed.

**Caution:** After completion of all function settings, please remove the batteries from the unit prior to installation.

**POWERING UP**

The Motion Activated Dual Light & Video Camera is powered by batteries for optional setting selection. Press and release the battery cover and insert 4 AA size 1.5V alkaline batteries (FIGURE 1). Re-cover the battery housing.

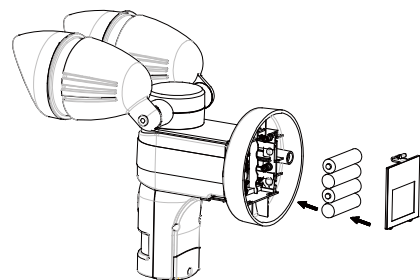


FIGURE 1

Once the Motion Activated Dual Light & Video Camera is powered up, it enters PIR warm up mode. The LCD displays as below (FIGURE 2).

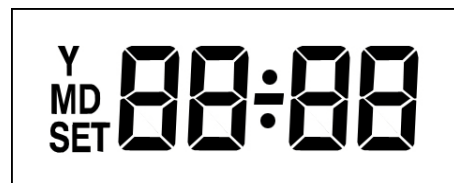


FIGURE 2

After 3 seconds, the unit enters standby mode (as shown in FIGURE 3). It implies the unit is ready for



(6) After bulb is in place, reposition the lampshade by turning clockwise. (FIGURE 8b).

## FUNCTION SETTINGS

The Motion Activated Dual Light & Video Camera has an LCD panel with three control knobs: **Set**, **Up** and **Down** (FIGURE 9).

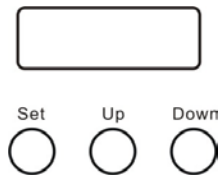


FIGURE 9

### TWO SETTING FUNCTIONS

The Motion Activated Dual Light & Video Camera has two setting functions: **general setting** and **local time setting**. In standby mode, prompt pressing or pressing for about 3 seconds on the **Set** button can lead to different settings. The following diagram illustrates setting sequences.

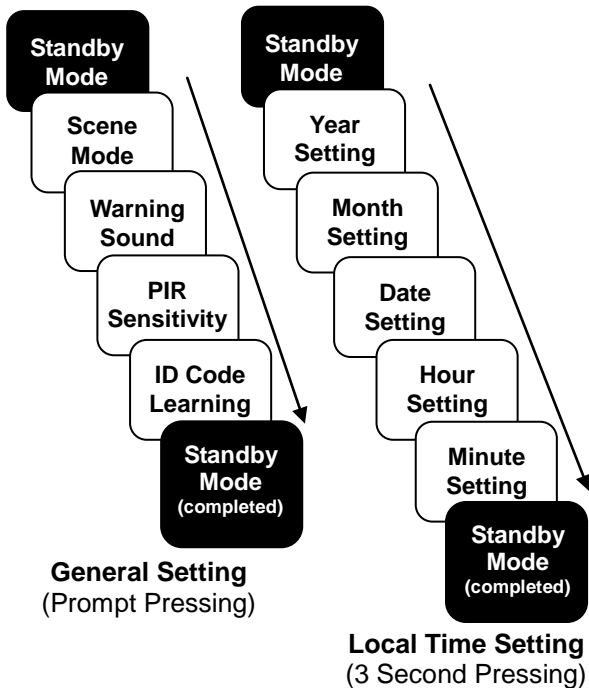


FIGURE 10

### LOCAL TIME SETTINGS

The Motion Activated Dual Light & Video Camera has 'pre-record' and 'time record' functions. The pre-record time is the length of time before the unit detects motion; varies from 4 to 12 seconds. During this time, video will be taken. To ensure you get correct time and day for the recorded images, it is important to set the year, month, day, and time accurately. Please follow the steps below to set up local time.

#### 1. YEAR

Under standby mode (FIGURE 3), press **Set** for 3 seconds and light flashes once to enter local time.

When **Y** displays on the LCD screen, it is ready to be set.

Year range is between 2010 and 2099. Press **Up** or **Down** to select correct year, as shown below:

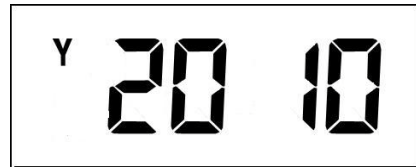


FIGURE 11

#### 2. MONTH & DATE

Once year setting is complete, press **Set** and **MD** displays on the LCD. The unit is ready for month and date settings.

Month ranges from 1 to 12. Press **Up** or **Down** to select correct month. The press **Set** to adjust the date. The digit will not flash. Simply press **Up** or **Down** to select correct date. The date ranges from 1 to 31. The LCD shows as below:



FIGURE 12

#### 3. HOUR & MINUTE

Now press **Set** to enter the hour and minute settings.

Hour ranges from 00 to 23. Press **Up** or **Down** to select correct hour. Then press **Set** to adjust the minutes. The digit will not flash. Simply press **Up** or **Down** to select. Minute ranges from 00 to 59. The LCD shows as below:



FIGURE 13

After settings are completed, press **Set** and LCD returns back to standby mode (FIGURE 3). This implies the local time setting is completed. PIR stops detecting function for one minute.

**Note:** If no action is taken within 12 seconds, the LCD returns back to standby mode and your settings are not saved. To ensure the settings have been saved properly, always keep pressing **Set** until LCD returns back to Standby Mode.

### GENERAL SETTINGS

#### 1. SCENE MODE

Scene selection allows you to choose the most suitable

combination of the unit's functions. In standby mode (FIGURE 3), press **Set** to enter scene mode. The LCD shows as below:

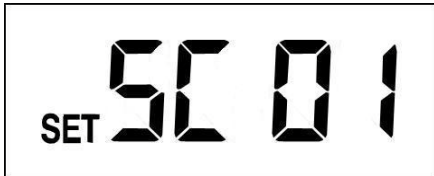


FIGURE 14

Scene one is the preset mode. Press **Set** and the light turns on to remind user that the unit is operating. Four scenes are available for selecting. Press **Up** or **Down** to change the scene.

After desired scene is selected the light flashes once and then turns on steadily for 10 seconds. This implies the scene change is in progress. Once the light turns off, if you wish to save the setting or skip other settings, keep pressing **Set** until LCD returns back to standby mode.

**Note:** Under scene mode, if no action is taken within 12 seconds, LCD returns back to standby mode and the light turns off; the setting isn't saved.

There are 4 scene modes:

**1.1 Scene 1**

**All armed mode** (FIGURE 15). Once the PIR detects motion, the camera and light turn on and the microphone starts recording. Warning sound plays for 10 seconds.



FIGURE 15

Function	Ambient Light	
	Day	Night
Camera & MIC	On	On
Warning Speaker	On	On
Light	On	On

**1.2 Scene 2**

Once PIR detects motion, the camera and microphone start recording. Depending on the ambient light (day or night) the speaker and light turn on.



FIGURE 16

Function	Ambient Light	
	Day	Night
Camera & MIC	On	On

Warning Speaker	On	Off
Light	Off	On

**1.3 Scene 3**

Once PIR detects motion, the camera and microphone start recording. Depending on the ambient light (day or night) speaker and light turn on.



FIGURE 17

Function	Ambient Light	
	Day	Night
Camera & MIC	On	On
Warning Speaker	Off	On
Light	Off	On

**1.4 Scene 4**

The camera and warning speaker are off. This is energy saving mode. Once PIR detects motion, depending on the ambient light (day or night) the light turns on/off. The light can also be turned on/off via a remote control.



FIGURE 18

Function	Ambient Light	
	Day	Night
Camera & MIC	Off	Off
Warning Speaker	Off	Off
Light	Off (Remote Control ON/OFF)	On (Remote Control ON/OFF)

**Note:** In Scene 4, local time setting is not available

**2. WARNING SOUNDS**

In scene mode, press **Set** to enter warning sound settings. The LCD shows as below:



FIGURE 19

Warning sound 1 is the preset sound. **5 warning sounds are available for selecting.** Warning sounds 3 and 4 are open for your voice/sound recording. The playtime for each warning sound is 10 seconds, and the

sound volume is 85 dB at 30 cm (11.8 in.) distance.

Press **Set**; the light is still on to remind user the unit is operating. 5 warning sounds are available for selecting, press **Up** or **Down** to change warning sound.

After desired sound is selected, if you wish to skip other settings keep pressing **Set** until LCD returns back to standby mode which implies setting is completed.

**Note:** Under warning sound mode, if no action is taken within 12 seconds, the LCD returns back to the standby mode and the light turns off. The setting is not saved.

There are 5 warning sounds:

### 2.1 Warning Sound 1

Pre-set alarm sound (this cannot be changed)



FIGURE 20

### 2.2 Warning Sound 2

Dog barking sound (this cannot be changed)

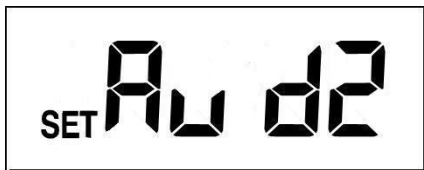


FIGURE 21

### 2.3 Warning Sound 3

Open for user recording; you can record your own audio warning.

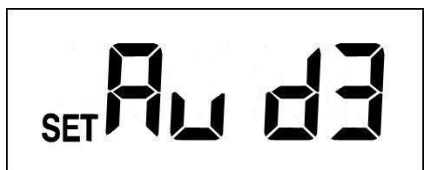


FIGURE 22

### 2.4 Warning Sound 4

Open for user recording; you can record your own audio warning.



FIGURE 23

Built-in microphone is used for video recording and for creating your unique warning sounds.

To create your unique sounds (warning sound 3 & 4):

- a. Select warning sound # 3 or 4
- b. Press **Set** for 3 seconds. The light flashes once to imply the unit is ready for recording
- c. Wait for 5 seconds. The LCD shows 'REC' and the recording can begin (FIGURE 24).



FIGURE 24

- d. Record time is 10-seconds
- e. After recording, the LCD returns back to warning sound 3 or 4 (FIGURE 22 or 23).
- f. The unit will replay the recorded sound for verification
- g. After sound is played, the LCD returns back to standby mode (FIGURE 3). Sound recording and warning sound selection is completed. Note: PIR stops detecting function for one minute
- h. If warning sound 1, 2 or 5 is selected, press **Set** for 3 seconds so you will not execute recording function. Ten seconds after LCD returns back to standby mode, the setting of warning sound is completed.

**Note:** If you wish to execute sound recording while the unit is performing video recording, the sound recording will not be executed until video recording is completed.

### 2.5 Warning Sound 5 (Mute Mode)

Mute mode (this cannot be changed)



FIGURE 25

## 3. PIR SENSITIVITY

Under warning sound mode, press **Set** to enter PIR sensitivity selection.



FIGURE 26

Press **Set**. The light is still on to remind user the unit is operating. 4 PIR sensitivities are available for selecting. Press **Up** or **Down** to change sensitivity. PIR sensitivity #1 is the highest sensitivity and the preset value.

After desired sensitivity is selected, if you wish to skip the other settings, keep pressing **Set** until LCD returns back to standby mode which implies setting is completed.

The PIR sensor can be swiveled in different directions to adjust detection coverage.

**Note:** When in PIR sensitivity settings, if no action is taken within 12 seconds, the LCD returns back to

standby mode and the light turns off. The setting is not saved.

There are 4 PIR sensitivity displays:

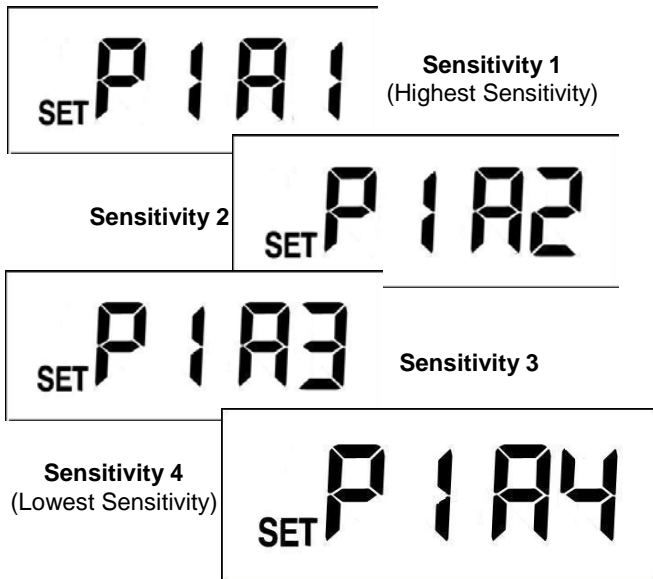


FIGURE 27

**4. ID CODE LEARNING**

When in PIR sensitivity settings, press **Set** to enter ID code learning mode. The LCD displays as below:

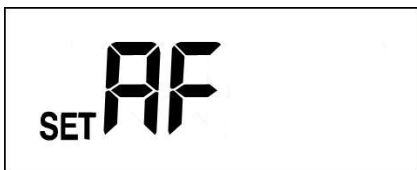


FIGURE 28

Press **Set** and the light stays on to remind user the unit is operating. Once the unit enters ID code learning mode, press **Set** for 3 seconds. The light will flash and the unit starts ID code learning. A thirty second countdown will start and the LCD displays as per below (FIGURE 29);

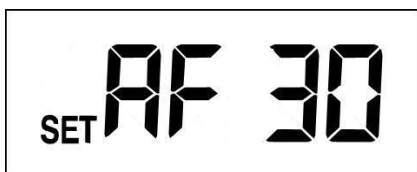


FIGURE 29

If ID code learning is not finished within 30 seconds, it fails coding and the LCD returns back to standby mode. If ID code learning is successful, the LCD returns back to standby mode and PIR stops detecting function for one minute.

Once the unit receives RF signals for scene changing, the light flashes once and then turns on steadily for 10 seconds implying the scene change is in progress. After 10 seconds the light turns off. The setting is completed within one minute after the RF signal is received.

The unit can learn up to 12 ID codes. If you ever wish to clear ID codes, enter ID code learning mode. The thirty second countdown starts and press **Set** for 6 seconds. Please note that when ID code clearing is executed, ALL ID codes recorded in the unit will be cleared.

To ensure learning or clearing is successful, you can use the remote control to switch between scenes. Please refer to the user manual for the remote control for more operating information.

<b>If unit receives TURN ON signal</b>
It operates as a working light while the function of camera and PIR detection is off
<b>If unit receives TURN OFF signal</b>
The PIR and LUX detection of the unit are still active, but the light only turns on at night while camera is off

**Note:** Under ID code learning mode, if no action is taken within 12 seconds the settings are not saved and the LCD returns back to standby mode (the light turns off).

**SETTING THE LIGHTING SYSTEM**

(1) TIME ADJUSTMENT

The TIME adjustment controls how long the light stays on after motion has been detected, as well as video recording time. Three lengths of time are available for selection: 20 seconds, 1 minute and 5 minutes. Turn the TIME control knob to the position of 20s, 1min or 5min (FIGURE 30). Please ensure the control knob has been turned and set to the accurate position.

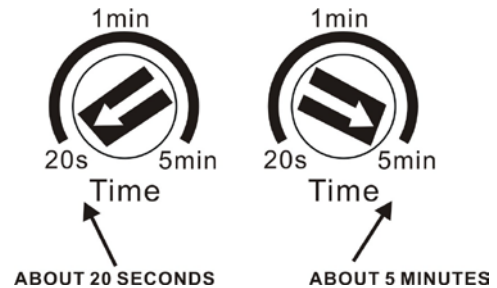


FIGURE 30

**Note:** While setting the time, if the PIR keeps detecting motion, the lighting time will be extended (video extended as well). Once time is up (i.e. 20 seconds, 1 minute or 5 minutes), the recording will stop. It takes 2 seconds before the next recording can be active.

(2) LUX ADJUSTMENT

The LUX adjustment determines at what light level the light starts operating.

To start turn the LUX control knob to the edge with the moon (dusk) position (FIGURE 31). In this provisional setting mode, the Motion Sensor remains inactive during daylight. At dusk when you have found the LUX level desired for operation, simply set the LUX control knob to the position desired (which will allow the sensor to become active as daylight declines)

**Note:** The LUX setting range is between 20 LUX to 200 LUX.



FIGURE 31

### CHOOSING A MOUNTING LOCATION

- For best results affix the unit on a solid surface, 2 - 2.5m (6.5 – 8 feet) above the ground
- Avoid aiming the unit at pools, heating vents, air conditioners, or other objects which change in temperature rapidly
- Sunlight falling directly on the front of the unit may affect video quality. It is recommended to test the location prior to installation.
- Try to avoid pointing the unit at trees, shrubs or where the motion of pets may often be detected
- The motion sensor is more sensitive to objects moving across its field of view. It is less sensitive to an object moving directly towards the sensor head. (FIGURE 32).

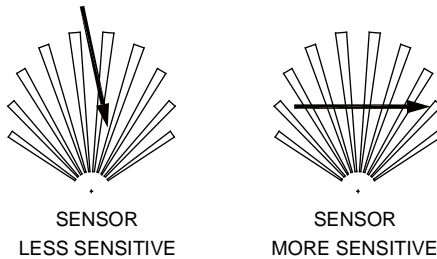


FIGURE 32

### SAFETY PRECAUTIONS

- Do not install the Motion Activated Dual Light & Video Camera when it is raining
- Be sure to switch **off** power source before installing
- To avoid fire or burning hazards; allow fixture to cool before touching. The bulb and the fixture operate at high temperatures
- When mounting on the wall, the unit must be installed vertically (FIGURE 33a), not horizontally (FIGURE 33b).

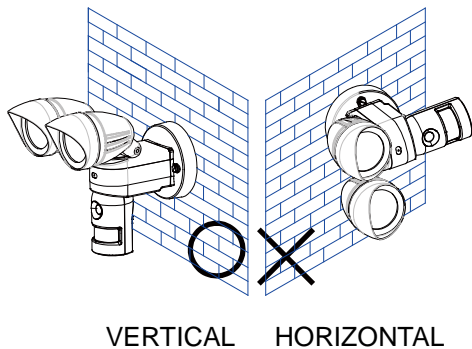


FIGURE 33a & 33b

### IMPORTANT

Installation must be performed by skilled technicians who are aware about the standards and technical requirements of the appliance and its proper installation.

Check your local codes as they apply to your situation. If the house wiring is aluminum, consult with an electrician about proper wiring methods.

Before proceeding with the installation, **TURN OFF THE POWER TO THE LIGHTING CIRCUIT AT THE CIRCUIT BREAKER OR FUSE BOX TO AVOID ELECTRICAL SHOCK.**

### INSTALLATION

A drill and a screwdriver are needed for installation. Select a location for the unit based on the coverage angles as shown in FIGURE 34.

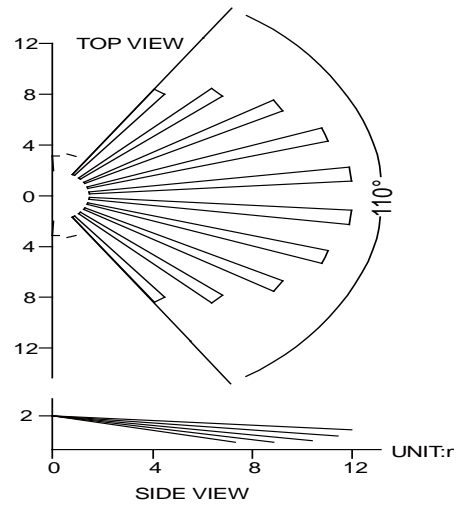


FIGURE 34

Install a wall switch adjacent to the power source. (FIGURE 35). This will help you operate the unit with ease.

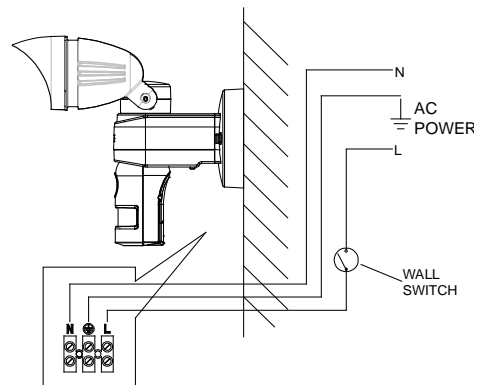


FIGURE 35

### WIRING INSTRUCTIONS

#### American Version

- (1) Switch off the power source or wall switch
- (2) Line up the holes on the mounting bracket with the holes on your junction box. Using fitting screws (depending on size of the holes in your junction box), and attach the mounting bracket to your junction box (FIGURE 36).

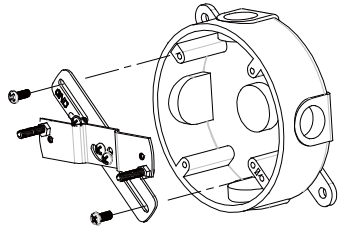


FIGURE 36

- (3) Place the gasket in position before wiring
- (4) Connect the **brown** wire from the fixture to the **brown** (Live) power supply wire from your power source using the wire nuts provided. Connect the **blue** wire from the fixture to the **blue** (Neutral) power supply wire using the wire nuts provided. Connect the **yellow/green** wire from the fixture to the **yellow/green** (Earth) power supply wire using the wire nuts provided (FIGURE 37).

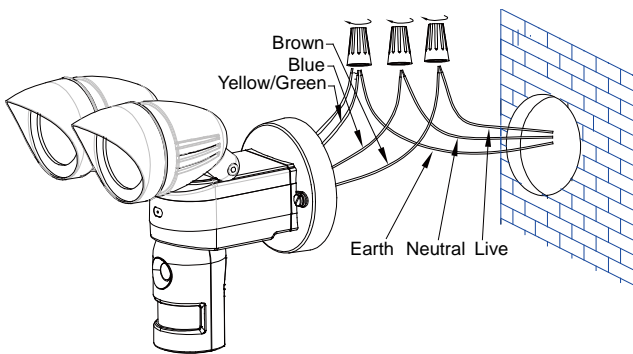


FIGURE 37

- (5) Place the wiring box and secure it with the two screws provided. (FIGURE 38)

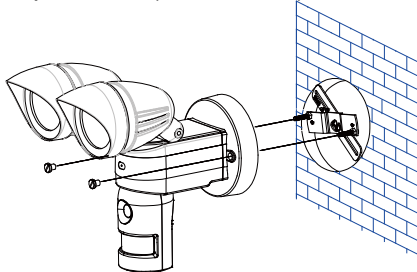


FIGURE 38

**Note:** THIS EQUIPMENT MUST NOT BE MOUNTED ON AN OUTLET BOX WHICH IS SUPPORTED BY A BAR HANGER (or equivalent)

## TROUBLESHOOTING

Light does not turn on:

- Confirm that you have made a correct “wiring connection”
- Make sure that the bulb has not burned out and is installed correctly

Warning Sound is on after powering up:

- SD card is not inserted

PIR and LUX settings are not working:

- Do not allow sunlight to fall directly on to the front of the unit

Warning sound and video recording is not on:

- They are on only when the unit is triggered
- Make sure the unit is not on Scene 4
- Please re-power the unit

Filmed videos can't be saved onto the SD card:

- Damage of the videos might be caused by inappropriate retrieval/insertion of SD card; ensure the unit is powered off before action is taken

Video and sound recording is not functioning:

- The function is disabled if the unit is set to scene 4

Views of people are blurred during the night:

- Avoid the sky as a background; turn the camera lens down if needed
- Try not to spot the light on reflective objects; the reflection of light could cause blurriness

## SPECIFICATIONS

Power Requirement	120V~ 60Hz for USA or 220-240V~ 50Hz for EU or 1.5V AA alkaline battery x 4 (for SD card & camera only)
Lighting Load	Max. 60W x 2 G9 Halogen Bulb (VC613-1) Max. 60W x 1 G9 Halogen Bulb (VC613-4)
PIR Detection Angle	Up to 150°
PIR Detection Distance	Up to 12m under 28°C
Protection Class	I
Protection Degree	IP44 for Europe. Suitable for wet locations for USA
Swiveling Angle	Sensor Part: Horizontal 90° (45° left, right), Vertical 30° (downward)
Mounting Height	2 to 2.5m
Time Adjustment	20 secs/1 min /5 mins
Lux Adjustment	Yes
Warm Up Time	About 60 second
Operating Temperature Range	-10°C ~ 40°C. 20~85% relative humidity, non-condensation.

## CAMERA

Pixel	640 x 480 Pixel VGA
Lux Sensitivity	1 Lux
White Balance	Auto
AGC	Auto
Backlight Compensation	Auto
SNR	>48 dB
Gamma Compensation	0.45
Electric Shutter	Auto
Angle	60°
Microphone	Built-in

## SD Card



Write-protect Switch	YES
Capacity	Min. 512MB ~ Max. 32GB (2GB SD card is included)
Format	FAT/FAT32

*\*Specifications are subject to change without prior notice.*

A501111614R03



**Federal Communication Commission Interference Statement**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions.

- 1) This device may not cause harmful interference, and
- 2) This device must accept any interference received, including interference that may cause undesired operation.

Per FCC 15.21, you are cautioned that changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

**IMPORTANT NOTE:**

**FCC Radiation Exposure Statement:**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Do not dispose of electrical appliances as unsorted municipal waste, use separate collection facilities.

Contact your local government for information regarding the collection systems available.

If electrical appliances are disposed of in landfills or dumps, hazardous substances can leak into the groundwater and get into the food chain, damaging your health and well-being.

When replacing old appliances with new once, the retailer is legally obligated to take back your old appliance for disposal

at least for free of charge.

**Q & A**

1. Is a software CD needed to view video from a computer? No – the SD card will store the video recordings and can be inserted directly into your computer for viewing/saving videos

2. Does the camera record video and still images? No – this is a video recording unit only