

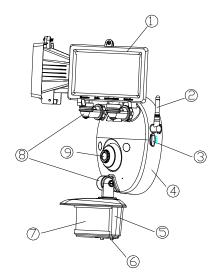
### Model: F250

## 2.4GHz PIR MOTION ACTIVATED LIGHTING CAMERA SYSTEM

# HALOGEN MOTION DETECTED SECURITY LIGHTING WITH WIRELESS SECURITY CAMERA

#### **FEATURES:**

- Turns on light when motion is detected
- Automatically turns lighting off.
- Photocell keeps the lighting off during daylight hours.
- Wireless security camera to monitor day or night.



- ① Floodlight
- 2.4G Antenna
- 3 Channel Selection Switch
- Wiring Box
- (5) Passive Infrared Motion Sensor (PIR)
- 6 Adjusting Knob (Time, Lux)
- 7 PIR (Passive Infrared) Lens
- 8 Adjusting Screw
- 9 Camera

#### INTRODUCTION

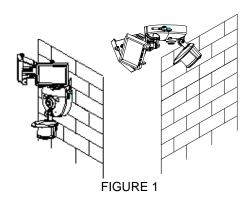
Your First Alert 2.4GHz MOTION ACTIVATED LIGHTING CAMERA SYSTEM is a unique surveillance system for your home or business. The system includes a PIR LIGHTING CAMERA and a Wireless Receiver. Using the Wireless Receiver as a bridge to connect to your TV, you will see and hear real-time video images at all times. At night, the built-in passive infrared (PIR) motion sensor turns on the floodlight when it detects motion in its coverage area so the camera images can be seen on the TV for improved night time vision. During the day, the built-in photocell sensor saves electricity by deactivating the floodlight. A 4-position time adjustment switch lets you select how long the floodlight will stay on after activation. Adiustable 4-channel wireless system avoids interference. Two operation options let you choose: Automatic Operation or Manual Override.

# Note: Read this entire manual before you start to install the system.

#### SAFETY PRECAUTIONS

- Do not install the PIR LIGHTING CAMERA when it is raining.
- Be sure to switch off the power at the power source before installing.
- Make sure that the power wiring comes from a circuit with an external 16A miniature circuit breaker for the short circuit protection or a suitable fuse.
- Do not remove the adjusting screw. Tighten the connection of the floodlight head assembly and motion sensor to the base to avoid any rotation.

The unit is wall and ceiling mountable. (FIGURE 1)



 When mounting on the wall, it can be installed only vertically (FIGURE 2a), not horizontally (FIGURE 2b).

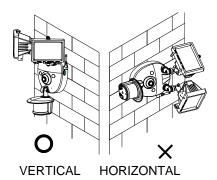


FIGURE 2a & 2b

 The distance between floodlight and PIR motion sensor cannot be too close because the heat from the floodlight will hinder the normal operation of the PIR motion sensor. (FIGURE 3)



 Both camera and PIR can be adjusted counter-clockwise and clockwise. The camera is 30° and PIR is 90° to each side. (FIGURE 4)

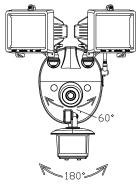
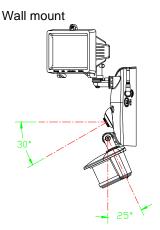


FIGURE 4

 The suggested swiveling angle of camera and PIR are outlined hereunder: (FIGURE 5)



Ceiling mount

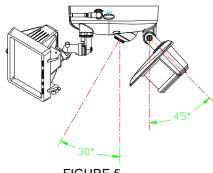


FIGURE 5

#### **IMPORTANT**

Skilled technicians who are informed about the standards and technical requirements of the appliance and its proper installation must perform installation.

A qualified electrician or technician shall do maintenance or repairing work such as replacing current fuse.

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

#### CHOOSING A MOUNTING LOCATION

- For best results, install your PIR LIGHTING CAMERA on a solid surface, 6.5ft. above the ground.
- For outdoor installation, a location under eaves is preferable.
- Avoid aiming the motion sensor at pools, heating vents, air conditioners or objects that may change temperature rapidly.
- Do not allow sunlight to hit directly on the front of the unit
- Try to avoid pointing the unit at trees or shrubs where the motion of pets or animals may be detected.
- The transmission range to the Wireless Receiver is up to 300ft. in clear line of sight. \*Quality of picture will deteriorate as the distance increases.
- Prior to mounting the light fixture, remember to position the motion sensor so that a moving object

cuts "across its beams, not directly towards them." (FIGURE 6).





**SENSOR** LESS SENSITIVE SENSITIVITY TO MOTION FIGURE 6

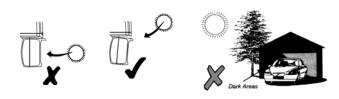
**SENSOR** MORE SENSITIVE

\* Maximum open space transmission range. Actual range may vary dependent upon building materials and other obstructions in the path of the wireless signal.

#### **INSTALLATION**

Avoid pointing the camera directly at a light source. When installing the camera outdoors, you should ensure that the camera lens will not become dusty and the camera does not point directly at a light source (i.e. direct lighting or sun light), as the picture quality will be impaired. Additionally, the camera must be positioned so that it will not point directly to the sun (sunrise or sunset) or any bright lights as this may cause damage to the camera. The best viewing angle is achieved at greater heights (i.e. 8 to 9 ft) with the camera pointing down. Also, avoid viewing areas where half the area is in bright sunlight and the other half is dark.

The ideal position for your camera will vary greatly depending upon your application. If you are installing the camera adjacent to your front door, bear in mind not to position it too far away, as you may not be able to hear any speech or sound.



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

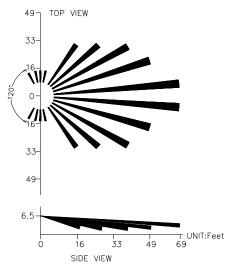


FIGURE 7

Install a wall switch adjacent to the power source. (FIGURE 8). This will help you operate this PIR LIGHTING CAMERA with ease. See OPERATION for further information.

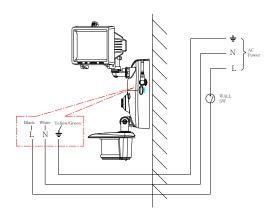


FIGURE 8 WIRING INSTRUCTION

- Switch off the power source or wall switch.
- 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), attach the mounting bracket to your junction box. (FIGURE 9).

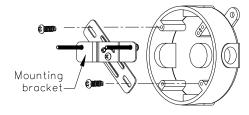


FIGURE 9

- (3) Place the gasket in position before wiring.
- (4) Connect the black wire from the fixture to the black (Live) power supply wire from your power source using the wire nuts provided. Connect the white wire from the fixture to the white (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 10)

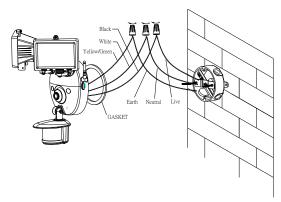


FIGURE 10

(5) Place the wiring box and secure it with the two screws provided (FIGURE 11).

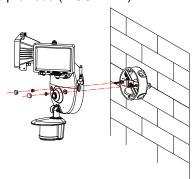


FIGURE 11

(6) Adjust the antenna upright and vertically to the ground.

#### SETTING THE LIGHTING SYSTEM

#### (1) TEST MODE

- Turn the Lux control and the Time control counter-clockwise to the edge – the TEST position (T) See Figure 12 and Figure 13
- Turn on the wall switch. The floodlight will turn on for about 90 seconds to warm up. Then it turns
- Walk through the detection area. The floodlight turns on when you move and turns off when you stop. Wait for the floodlight to turn off before moving again to test the sensor.
- Adjust the motion sensor to cover the desired detection area. See Installation for details.

#### (2) TIME ADJUSTMENT

The TIME adjustment controls how long the floodlight will stay on after the motion has been detected.

Turn the TIME control knob clockwise to increase (up to

about 12 minutes) how long the floodlight stays on or counter-clockwise to decrease (down to about 5 seconds) the time delay (FIGURE 12).

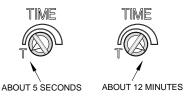


FIGURE 12

#### (3) LUX ADJUSTMENT

The LUX adjustment determines at what light level the floodlight will start operating when you set the sensor to automatic operation.

Provisionally turn the Motion Sensor LUX control knob to the edge at the moon (dusk) position (FIGURE 13). In this provisional setting mode, the Motion Sensor remains inactive during daylight. At dusk when you find it is the LUX level desired for operation, simply set the LUX control knob to the position that will become active as daylight declines.



FIGURE 13

(4) CHANNEL SELECTION SWITCH

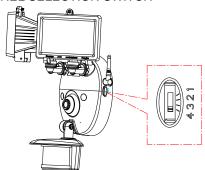


FIGURE 14

The channel between the Lighting Camera and Wireless Receiver must be the same. In case of interference, adjust the channel selection switches for better resolution. (FIGURE 14)

**Note:** Turn off the wall switch or power source before setting the channel switch. Set the channel switch to the channel you desired prior to turning on the wall switch or power source, thus ensuring users' safety and product's stability.

#### **OPERATION**

By using the wall switch connected to your motion sensor, you can easily select one of two modes of operation: Automatic Operation and Manual Override.

#### (1) AUTOMATIC OPERATION

Turn on the wall switch. The light will be automatically on when the motion sensor detects motion and will be off after the motion is stopped or out of detection range. The unit is active only from dusk to dawn.

#### (2) MANUAL OVERRIDE

To keep the light on regardless of the motion, you can override the Automatic Operation. Turn the wall switch off and on twice within 4 seconds. The interval between the first and second operation must be within 0.5 - 2 seconds.

In Manual Override mode, the light will remain on for about  $4 \sim 6$  hours despite no motion; then the light will turn off and the motion sensor will be back to Auto Operation mode automatically.

Users can also set the motion sensor back to Auto Operation by turning off the wall switch for at least 10 seconds and then turn it back on.

#### WIRELESS RECEIVER

The 2.4 GHz Wireless Receiver is designed to connect to TV, VCR, or DVR, serving as a medium to receive the radio signal from the PIR Lighting Camera. There are four selectable channels that can be manually operated if needed. By connecting it to the TV, the camera images can be viewed on the TV at all times. It is so user-friendly that you can complete the installation in a few minutes.

#### INSTALLATION

Connect your Receiver unit directly to your TV via RCA to RCA cable package provided.

Plug the yellow (video) and white (audio) RCA connectors

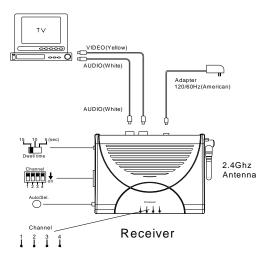
into the corresponding colored RCA connectors (video and

audio inputs) on the TV or monitor.

2. Plug the yellow (video) and white (audio) RCA connectors

into the corresponding RCA connectors on the Receiver.

- 3. Connect the Receiver with the power adapter and then plug the power adapter into your main power supply. You'll see that all or one of the Channel LEDs on the Receiver will be on at the same time subject too if you already choose the channel.
- Adjust the antenna of the receiver to 90° horizontally.
   Also adjust Channel Switch at the same channel you select on Camera.
- 5.To view the picture, simply switch the TV channel to the external audio/video channel, i.e. AV1, 2 or 3, depending on which channel you connect.



If in doubt, refer to your television instruction manual. Your television is now ready and you will watch whatever your camera sees and hears on your television screen.

PLEASE NOTE: If you hear a loud howling noise it is because the camera is in the same room as the television and the camera's sensitive microphone will cause audio feedback. To avoid this, turn your television volume down or adjust the camera to a more appropriate angle/position.

#### **OPERATION:**

#### 1. Dwell time:

The length of time the camera picture remains on screen Auto IM/Scanning Mode (the dwell time) can be adjusted. Set the 'dwell time' switch on the left side of Receiver unit as you wish. (i.e. 5, 10 & 15 seconds)

#### 2. Channel Switch selection:

The Receiver unit can perform auto-scanning function up to 4 cameras by setting the channel switch. Please note the channel used between the Receiver unit and camera should be the same. The channel selection switch can be found on the left side of the Receiver unit. Set the channel on the Receiver unit according to the following suggestions:

(1) Single camera connection:

Channel 1, 2, 3 & 4 can be chosen. Set one of the channels to 'on' corresponding to the channel you set on the camera and the rest of the channels to 'off'.

(2) 2 cameras connection:

Recommend setting the Receiver unit 'channel' switch 1 & 3 or 2 & 4 to 'on' which camera will follow. For example, if you choose the Receiver unit channel switch 1 & 3, then set the channel switch 1 to "on" on one of the cameras, and set the channel switch 3 to "on" on the other camera.

(3) Multiple cameras connection (more than 3 cameras):

Set the Receiver unit 'channel' switch corresponding to the cameras channel switch you select respectively.

Note: For multiple camera connection, ensure that the location of cameras be adjusted properly avoiding interference.

#### 3. Auto scanning / Manual function:

The Receiver unit will perform Auto Scanning or Manual function when 2 cameras or more are installed. Please set the channel switch according to the Channel Switch Selection instruction.

- 4. Auto Scanning mode: Press and hold the 'Auto/Sel.' button for 5 seconds on the left side of Receiver unit, all channel LEDs shown on the front panel will be flashing instantly, which implies that the Receiver unit is on Auto scanning mode. The Receiver unit will automatically switch the camera image on view for the selected 'dwell time' in sequence.
- 5. Manual mode: By simply pressing the 'Auto/Sel.' button, the Receiver unit enters the manual mode that allows user to select and hold a particular camera's image.

#### Not working temporarily:

 Turn off the wall switch or power source for about 30 seconds. Set the channel selection switch to the channel you desired before turning on the wall switch or power source.

#### **Picture Not Clear:**

Re-position Receiver Unit or Antenna

#### TROUBLE SHOOTING

#### Light does not turn on:

- Light switch is turned off.
- Confirm that you have made a correct "wiring connection".
- Make sure that the bulb has not burned out.
- Fuse is blown or circuit breaker is turned off.
- Daylight turn-off is in effect (recheck after dark)

#### Light remains on:

- Make sure the wiring connection is correct.
- If you set the motion sensor to Manual Override, remember that you must turn the wall switch off for at least 10 seconds before switch the motion sensor back to Automatic Operation.
- Check if the TIME setting is correct.
- A lamp is positioned too close to the sensor or pointed at nearby objects that cause heat to trigger the sensor. (Reposition the lamp away from the sensor or nearby objects.)
- Sensor is pointed toward a heat source like an air vent, dryer bent, or brightly painted heat-reflective surface. (Reposition sensor)
- Light Control is on Manual Mode. (Switch to Auto)

#### Light turns on in day-light:

- Light control may be installed in a relatively dark location.
- Light Control is on Test. (Set control switch to an ON-TIME position)

#### Light turns on for no apparent reason:

- Light control may be sensing small animals or automobile traffic. (re-aim sensor)
- Sensitivity is set too high. (Reduce Lux sensitivity)

#### Light turns off too late in Dusk-to-Dawn setting:

Sensor is in a relatively dark location.

SPECIFICATIONS		
PIR		
PIR Lighting Camera	Transmitter	
Power Requirement	AC 120 V / 60Hz	
Lighting Load	2 x 150W max. Halogen bulbs	
PIR Detection Angle	Up to 240° at 68°F	
PIR Detection Distance	Up to 68ft at 68°F	
Swiveling Angle	Sensor Part: Horizontal 180° (90° left, right), Vertical 90° (upward), 35° (downward)	
Mounting Height	Recommended 6.5 Ft Wall Mount	
Wall Switch Control	On / Off / Manual Override	
Sensor Operation	Auto	
Time Adjustment	Test, 5 seconds ~ 12 minutes	
Lux Adjustment	Yes	
Warm Up Time	About 90 second	
CAMERA		
Camera Type	Color CMOS	
TV System	NTSC	
Resolution (TV lines)	320	
Pixel Array (H x V)	NTSC: 510 x 492	
Video Output	0.9~1.35Vpp, 75Ω	
Lens	f=4.4mm F=2.0	
Lens Angle	56°, Diagonal	
Microphone	Built-in	
2.4GHz Channel	2400~2483MHz ± 200KHz	
Power Adapter Input	AC 120V / 60Hz	
Receiver		
2.4GHz Channel	2400~2483MHz ± 200KHz	
Wireless	Receiver	
Power Adapter	9V 300mA	

output	
Communication Range	Max. 100m (in open space)
Protection Degree	IP44
Safety	FCC, ETL

Specifications are subject to change without prior notice.

#### 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.

A501110420R



# 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 quarantee 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.
- 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.

#### ONE YEAR LIMITED WARRANTY:

Your First Alert™ branded security kit is warranted to the original consumer against defects of workmanship and materials for a period of ONE YEAR from the original purchase date. If a defect or malfunction of this product occurs, World Office Products will repair or replace the product at World Office Products' option, free of charge. World Office Products reserves the right to charge freight and handling on all defective returns.

This warranty is void if the product has been subject to damage, unreasonable use, improper service or other causes not arising from defects in original material or workmanship.

This warranty does not include adjustments, parts or repairs required by circumstances beyond the control of World Office Products.

There are no expressed warranties other than those stated herein.

Any expressed or implied warranties, including but not limited to merchantability and fitness for a particular purpose, are limited to the above one-year warranty period. World Office Products shall not be liable for any incidental or consequential cost, expenses or damages resulting from any failure, defect or malfunction of this product.

Some states do not allow the exclusion of limitations of implied warranties or consequential damages. Therefore, the above limitations may not apply to you.

This warranty grants you specific legal rights and you may also have other rights that vary from state

#### **TECHNICAL SERVICE**

If you experience a problem, please follow this guide. If the problem persists, contact:

World Office Products

Website: www.securityfirstalert.com

Email: customerservice@worldofficeproducts.net

Phone: 954-332-1621 1-800-678-5891

Fax: 954-332-1624