C301U TX VC301 Rx VR121 2.4GHz PIR ACTIVATED LIGHTING CAMERA SYSTEM

PIR LIGHTING CAMERA



- ① Floodlight
- ② Tempered Glass
- ③ Wiring Box
- ④ Adjusting Screw
- 5 Lens
- 6 PIR Motion Sensor
- ⑦ Antenna
- (8) Channel Selection Switch
- ④ Lux Adjustment
- 1 Time Adjustment

Backplate (valid for European version)

INTRODUCTION

Your EVERSPRING 2.4GHz PIR ACTIVATED LIGHTING CAMERA SYSTEM is a unique surveillance system for your home or business operating at 2.4GHz. The system includes a PIR LIGHTING CAMERA and a Wireless Receiver. Using the Wireless Receiver as a bridge to connect to TV 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 that camera images can be clearly 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. Adjustable 4-channel 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 power source before installing.
- Make sure that the power wiring comes from circuit with an external 16A miniature circuit breaker for the short circuit protection or a suitable fuse.
- Keep minimum 0.8m away from the lighted objects.
- The adjusting screw shall not be removed. Tighten the connection of the floodlight head assembly and motion sensor to the base so as to avoid any rotation.
- The unit is wall and ceiling mountable.(FIGURE 1)



FIGURE 1

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



VERTICAL HORIZONTAL

FIGURE 2a & 2b

 The distance between floodlight and PIR Camera cannot be too close to avoid the heat from the floodlight being hindered the normal operation of PIR Camera. (FIGURE 3)



 The adjustable angle for the floodlight and PIR Camera can be 45° leftward and rightward. (FIGURE 4)



 FIGURE 4
The suggested swiveling angle of floodlight and PIR Camera are outlined hereunder: (FIGURE 5)

Wall mount

Ceiling mount



FIGURE 5

IMPORTANT

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

Maintenance or repairing work such as replacing current fuse shall be done by a qualified electrician or technician.

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 the best results, fix your PIR LIGHTING CAMERA on a solid surface, 2M 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 fall directly on the front of unit.
- Try to avoid pointing the unit at trees or shrubs or where the motion of pets may be detected.
- The transmission range to the Wireless Receiver is up to 100m in clear line of sight.
- Prior to mounting, keep in mind that the motion sensor is more sensitive to the motion, which is across the detection field and less sensitive to the motion, which moves directly towards the detector (FIGURE 6).





SENSOR SENSOR LESS SENSITIVE MORE SENSITIVE SENSITIVITY TO MOTION FIGURE 6

BULB INSTALLATION

- CAUTION: Always handle halogen bulbs with a soft cloth. Do not touch the bulb with your bare hand as it will shorten the life of the bulb.
- (1) Do not touch the floodlight while it is in use or still hot. Allow it to cool off (about 5 minutes) before touching it.
- (2) Do not use halogen bulb rated higher than 150 watts.
- (3) Disconnect the power cord or wall switch.
- (4) Unscrew the screw at the bottom of floodlight (FIGURE 7).



FIGURE 7

- (5) Install bulb by inserting one end first and depressing until enough clearance is gained to seat the other end of the socket. Rotate halogen bulb to assure proper seating.
- (6) Carefully replace the front surround and make sure that the seal is correctly positioned and then screw up tightly.

INSTALLATION

To facilitate installation, it is essential to get a drill and a screwdriver ready. Select a location for the unit based on the coverage angles shown in FIGURE 8.



FIGURE 8

Install a wall switch adjacent to the power source. (FIGURE 9). This will help you operate this PIR LIGHTING CAMERA with ease. See OPERATION for further information.

European Version



American Version



FIGURE 9

WIRING INSTRUCTION European Version

- (1) Switch off the power source or wall switch
- (2) Detach the wiring box from the backplate.
- (3) Use a flat blade screwdriver to break a hole on the rubber gasket. Route the power cord through the rubber gasket and strain relief by fastening the power cord with two screws provided.(FIGURE 10)



(4) Using the backplate as a template to mark the position of two fixing holes on the wall. Drill these two holes by inserting the plastic wall plugs supplied. Fix the backplate using the two screws provided. (FIGURE 11)



FIGURE 11 (4) Connect the BROWN wire (Live wire) to the terminal block "L" mark.

Connect the BLUE wire (Neutral wire) to the terminal block "N" mark.

Connect the YELLOW/GREEN (Ground wire) to the terminal block " — "mark. (FIGURE 12).



(5) Place the wiring box to the backplate using screws provided. (FIGURE 13)



FIGURE 13

5

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), attach the mounting bracket to your junction box. (FIGURE 14).



FIGURE 14 (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 15)



FIGURE 15

(5) Place the wiring box and secure it with the two screws provided (FIGURE 16).



FIGURE 16

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

SETTING THE LIGHTING SYSTEM

- (1) TEST MODE
- Furn the LUX control to the T position and the TIME adjustment slide switch to 5 second. (FIGURE 17)



- Turn on the wall switch. The floodlight will turn on for about 1 minute to warm up. Then it turns off.
- 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.

A 4-position slide switch provides you with four intervals (5 second, one, five and 10 minute). Before connecting it to the power source, set the 4-position slide switch to 5 second. After the elapse of warm-up period, adjust the switch to the period you desired. (FIGURE 18).



Note: 5" means 5 second 1 means 1 minute 5 means 5 minute 10 means 10 minute

(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 19). 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 which will become active as daylight declines.



FIGURE 19

(4) CHANNEL SELECTION SWITCH



FIGURE 20

For better communication, the channel between PIR Lighting Camera and Wireless Receiver must be the same. In case of interference, adjust the channel selection switch for resolution. (FIGURE 20)

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 around $4 \sim 6$ 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, VCD R/W or DVD R/W, 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

8

viewed from the TV at all times. It is so user-friendly that you can complete the installation in a few minutes.



- ① Channel Selection Button
- 2 Power
- (3) A/V Output
- ④ DC Jack
- 5 Channel LEDs

INSTALLATION

There are available in two versions : European and American.

European Version

To connect Receiver to your TV:

- 1. Plug the Scart connector cable that package included into your TV.
- Plug the other end, yellow (video), white (audio) and red (audio) RCA connectors into the corresponding RCA connectors on the Receiver. (FIGURE 21)



American Version

- To connect Receiver to your TV:
- 1. Plug the yellow (video), white (audio) and red (audio) RCA connectors into TV socket.
- 2. Plug the yellow (video), white (audio) and red (audio) RCA connectors into the corresponding RCA connectors on the Receiver. (FIGURE 22)



.

OPERATION

- 1. Connect the Receiver with 9VDC power adapter and set the Receiver in the same channel as that of the video device you have planned to view.
- 2. Power switch: Slide the switch to On position to turn on the power, while Off position to turn off the power.
- Connect the video device with power source and turn on the TV. Then switch the TV to the video mode. The video images can be viewed right from the TV.
- 4. The Channel LED will light up when the particular channel is in use.

TROUBLE SHOOTING

Light does not turn on:

Confirm that you have made a correct "wiring connection".

• Make sure that the bulb has not burned out.

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.

10

SPECIFICATIONS	
PIR Lighting Camera	Transmitter
Power Requirement	AC 120 V / 60Hz
	AC 230 V / 50Hz
Lighting Load	Max. 150W Halogen Bulb
PIR Detection Angle	Up to 110° at 20°C
PIR Detection Distance	Up to 12M at 20°C
Swiveling Angle	Lamp Part: Horizontal 90°, Downward 30°; Upward 90° Sensor Part: Horizontal 90°, Downward 45°, Upward 90°
Mounting Height	Recommended 2M (6.5 Ft) Wall Mount
Wall Switch Control	On / Off / Manual Override
Sensor Operation	Auto
Time Adjustment	5", 1, 5, 10
Lux Adjustment	Yes
Warm Up Time	About 1 min
Camera Type	Color CMOS
TV System	PAL/NTSC
Resolution (TV lines)	320
Pixel Array (H x V)	PAL: 628 x 582 NTSC: 510 x 492
Auto Exposure	Up to 1/15000 Sec.
Lens	f=4.4mm F=2.0
Lens Angle	56°, Diagonal
Sensitivity	<3 Lux @F1.2
S/N (Noise)	>48dB
Microphone	Built-in
2.4GHz Channel	2413MHz / 2432MHz 2451MHz / 2470MHz ± 200KHz
Wireless Receiver	Receiver
Power Adapter Input	AC 120V / 60Hz AC 230V / 50Hz
Power Adapter Output	9VDC 300mA
Video Output	0.9~1.35Vpp, 75Ω
Communication	Max. 100m (in open space)

Range	
Protection Class	Class I
Protection Degree	IP44
Safety	UL, cUL, FCC, CE

Specifications subject to change without notice.

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 guarantee that interference will not occur in a

11

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.

12