VC401 SOLAR PIR CAMERA SYSTEM

Installation and Operating Manual

What you get

There are two kind of compositions for you to choose from. One is a Solar PIR Camera System and the other is a single PIR Camera, both of which compositions are listed hereunder:

Solar PIR Camera System (VC401)

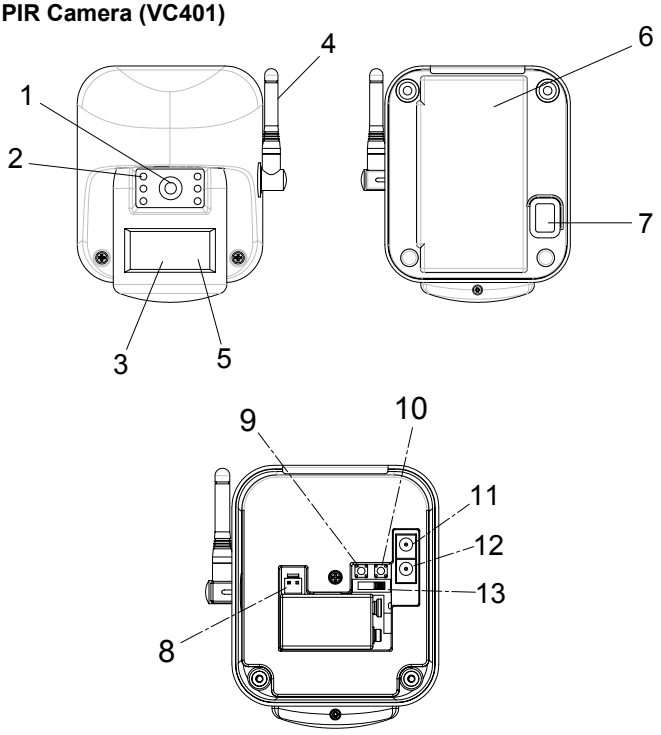
- 1 x PIR Camera (VC401)
- 1 x Solar Panel (EL401)
- 1 x 10m Cable
- 1 x 6V 1.2Ah Rechargeable Battery
- 1 x 9V Alkaline Battery

Single PIR Camera (VC401)

- 1 x PIR Camera
- 1 x AC Adapter 120V 60Hz /7.5VDC 300mA or
  1 x AC Adapter 230V 50Hz /7.5VDC 300mA
- 1 x 6V 1.2Ah Rechargeable Battery

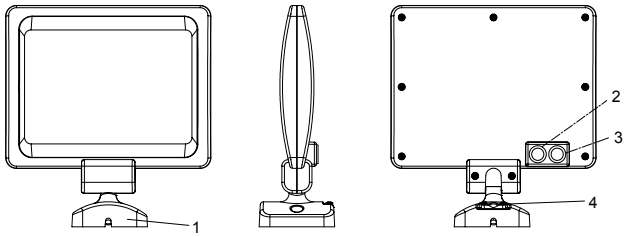
Product Layout

PIR Camera (VC401)



1. Lens
2. Infrared LEDs
3. PIR
4. Antenna
5. LED
6. Backplate
7. Rubber gasket
8. Battery jack
9. Learn button
10. Reset button
11. Solar jack
12. DC jack
13. Channel switch

Solar Panel (EL401)



1. Base
2. Solar Power Out
3. Solar Power In
4. Strain Relief

Introduction

The Solar PIR Camera System is designed to economically provide safety, security, convenience to your home and business. Its solar panel collects daylight and maintains a charge to the battery of the camera during daylight hours. A negligible amount of energy is released by the rechargeable battery to operate the camera during nighttime.

Caution

Pay attention to the following before you install:

1. Sufficient daylight: Solar panel requires constant charge during daylight hours. Please mount the solar panel at the location that can receive sufficient daylight exposure.

   To provide the optimum amount of sunlight to the Solar Panel, you should ideally mount the Solar Panel on a south facing wall. However, an easterly or westerly position will suffice.

   Although the Solar Panel is designed to work on any aspect wall, you should refrain from siting the unit on a north facing wall where possible.

Shadows cast by neighbouring walls, trees and roof overhangs should also be avoided. In practice, the Solar Panel should be positioned a minimum of twice the width of the eaves overhang, below the eaves where is reachable to sun exposure. Remember that in winter the sun is lower in the sky and you should avoid winter shadows where possible.

2. Detecting sensitivity: A passive infrared sensor operates by detecting the objective movement and heat. When the temperature of the moving object and its surrounding area are close in value, it may reduce PIR's sensitivity. The motion detector's infrared beams radiate outward like the slat of a wooden fence. Prior to mounting, keep in mind that the motion sensor is more sensitive to the motion that crosses these "slats", and less sensitive to the motion that moves directly towards the sensor.

3. Mounting height: For best results, mount the camera 2m above the ground. Select an appropriate location where the camera can clearly be seen and detect for best viewing effect.

4. Rechargeable battery
   A high capacity 6V 1.2Ah sealed lead acid rechargeable battery ensures that the Solar Panel is self maintainable during darkness and long winter periods.

5. Initial power-up battery
   An Alkaline 9V PP3 battery is supplied in the PIR Camera to provide the initial power to the system.

6. Infrared LEDs for improved night vision
   When PIR Camera is activated during nighttime, 6 infrared LEDs adjacent to the lens is of great help to enhance nighttime visibility.

7. Reset button
   When PIR Camera is not working properly, press the reset button for recovery.

Installation

Step 1: Install the PIR camera

1. Use the fixing template provided to mark the position of the two fixing holes. Drill two holes with 25mm in depth and 5mm in width by inserting the plastic wall plugs supplied.
2. Lead either the jack of solar connecting wire or the jack of DC power cord through the rubber gasket on the backplate, leaving 15cm length of wire inside the backplate. (FIGURE 1)

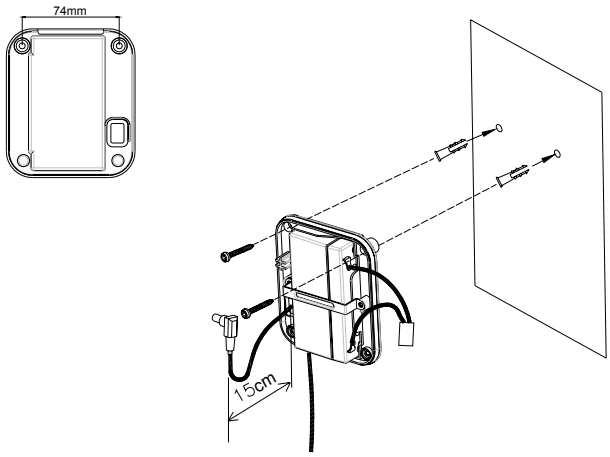


FIGURE 1

Note: If only a PIR Camera (VC401) is used, adopt the DC power cord for connection. If a whole system (VC401) is used, adopt the solar connecting wire for connection.

3. Screw the backplate to the wall using the fixing screws provided.
4. Adjust the channel switch, enabling its channel to be the same as that of the Receiver, such as Universal Receiver (VR111) or Wireless USB Receiver (VR131).
5. Connect the connector of rechargeable battery wire to the wire of battery jack. (FIGURE 2)

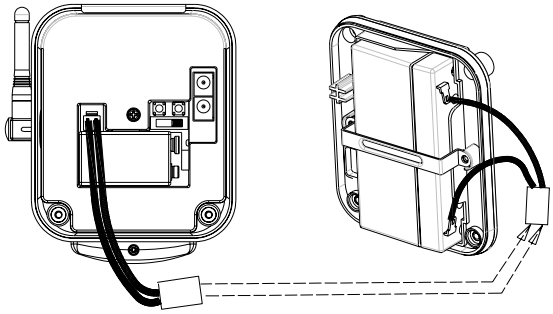


FIGURE 2

6. Plug either the jack of solar connecting wire or the jack of DC power cord to the camera's jack socket.
7. Refit the camera to the backplate using two fixing screws provided. (FIGURE 3)

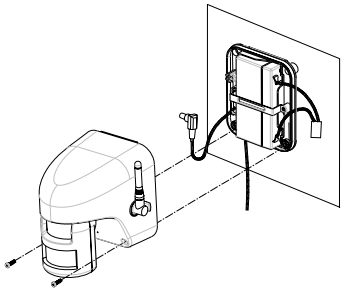


FIGURE 3

8. The PIR Camera can be swiveled downward to 50° and

160° horizontally.

9. Adjust the PIR Camera angle according to your need.

Step 2: Install the Solar Panel

1. Using the fixing template to mark the position of two fixing holes. Drill two holes with 25mm in depth and 5mm in width by inserting the plastic wall plugs supplied.

2. Loosen the screws from the strain relief located on the base of solar panel. (FIGURE 4)

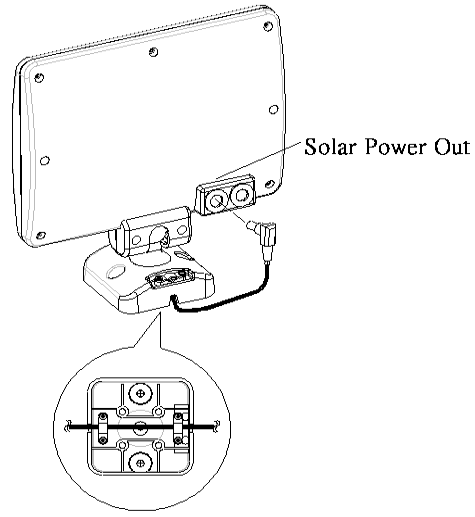


FIGURE 4

3. Route the solar connecting wire though two strain relief and fix them in place with screws respectively, leaving 20cm length of connecting wire for further connection.

4. Plug one end of the jacks with 20cm length of connecting wire to the 'solar power out' of rear side of the solar panel. (FIGURE 4)

5. Plug the other end of the jack to the Camera's solar jack socket.

6. Fix the base of solar panel to the plastic wall plugs using two screws provided. (FIGURE 5)

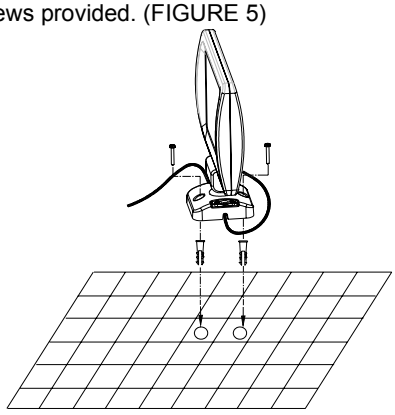


FIGURE 5

Step 3: Expand the Solar Panel (option)

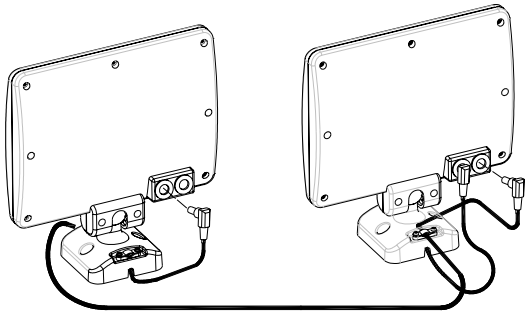
1. Using the fixing template to mark the position of two fixing holes. Drill two holes with 25mm in depth and 5mm in width by inserting the plastic wall plugs supplied.

2. Loosen the screws from the strain relief located on the base of solar panel. (FIGURE 4)

3. Route the solar connecting wire though two strain relief and fix them in place with screws respectively, leaving 20cm length of connecting wire for further connection.

4. Plug one end of the jacks with 20cm length of connecting wire to the 'solar power out' of rear side of the solar panel.

5. Plug the other end of the jack to the 'solar power in' of the rear side of the first solar panel. Fix its solar connecting wire to the strain relief of the base of solar panel, using the screws provided. (FIGURE 6)



2^{nd}. 1^{st}.

FIGURE 6

6. Fix the base of solar panel to the plastic wall plugs using two screws provided.

Operating Instruction

1. When connecting to a 6V/1.2Ah rechargeable battery, the PIR Camera will enter warm-up period for 1 minute and its LED will illuminate steadily. During warm-up period, the PIR Camera will not transmit any radio signal. Once the PIR Camera is triggered, the camera images can be viewed from the video devices for 1 minute, then turned off.

2. When connecting to a 7.5V/300mA adapter (optional), the PIR Camera will warm up for 1 minute and its LED will illuminate steadily. During warm-up period, the PIR Camera will keep emitting radio signal. Once the PIR Camera is activated, the camera images can be viewed from the video devices for 1 minute then turned off. Regardless of no activation, 24h surveillance can be made via turning on the video devices.

3. Turn on TV or monitor and walk through the detection coverage of PIR Camera, the camera images can be viewed instantly.

4. When the image on TV is not clear, it means that somebody may use the same channel as yours in your neighborhood. For fast resolution, adjust the PIR Camera and receiver to another channel.

Troubleshooting

Status	Possible Cause	Remedy
LED does not light up	a. Reverse polarity b. Run out of battery	a. Follow the polarity shown inside the battery compartment for loading the batteries b. Insert a 9V battery and have it charged to the 6V rechargeable battery
Ambiguous image under observation	a. Channel has been interfered b. Receiving/transmission distance too far or radio signal has been blocked	a. Check that the channel switches on the PIR Camera and Receiver are set to the same number b. Reposition the PIR Camera or Receiver

Specifications

VC401 Solar PIR Camera System			
Camera Type	Color	Camera Angle	Left & Right ±80°, Down 50°
Picture Type	CMOS	Microphone	Build in
TV System	PAL/NTSC	Transmitting Frequency	2400~2483MHz (for 4 channels)
Sensitivity	3Lux f1.2	Battery	1 x 9V back up battery, 1x 6V rechargeable battery
Resolution (TV lines)	250		
Lens Angle	56° Diagonal	Power Supply Source	Solar Panel (110*160mm)
Lens	6.0mm F1.8	Channel Switch	4 positions for 1~4 selection
AC Adapter (option)	AC120V 60Hz / 7.5V DC 300mA AC230V 50Hz / 7.5V DC 300mA	PIR Detect ion Distance/Angle	8M/80° (under 28°C)

A501110214R

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.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

IMPORTANT NOTE:

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.