

PIR-SD User's Manual

PIR Motion Sensor with Hidden Color Camera,
SD Recorder, and Remote Control

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FCC Information

Notes on FCC's "Consistent Statement of Information" This product meet the requirements specified in Part 15 of FCC Regulation. Operation rests with the following two conditions:

- (1) The equipment should not cause any harmful interference.
- (2) The equipment must receive and process any interference, including any possible interference caused by operation mistakes.

After testing the product, we confirm that the camera complies with the provision for class C digital equipment in the 15th part in FCC regulations; and the receiver complies with the limitations for class B digital equipment in Part 15 of FCC regulation. The product generates, applies and emits radio waves. It might cause harmful interferences to wireless communication if not be installed and used following the description of the manual.

The product may cause interference in residential area, and the customer should take remedies to eliminate the interference on their own costs. If the product causes any harmful interference to wireless equipment or disturbs the receiving of TV signals (it can be identified by turning on and off the product), you can solve the trouble by following methods:

- Readjust the product or put it in another place.
- Extend the distance between the equipment interfered and the product.
- Referto dealers or experienced radio electrician for help.

Warranty

SecurityMan warrants that this product will be free from defects in title, materials and manufacturing workmanship for one year from the date of the purchase or otherwise specified on the package. If the product is found to be defective then, as your sole remedy and as the manufacturer's only obligation, SecurityMan will repair or replace the product.

This warranty is exclusive and is limited to this product. This warranty shall not apply to products that have been subjected to abuse, misuse, abnormal electrical or environmental conditions, or any condition other than what can be considered normal use.

Warranty Disclaimers

SecurityMan Inc, makes no other warranties, express, implied or otherwise, regarding this product, and specifically disclaims any warranty for merchantability or fitness for a particular purpose.

The exclusion of implied warranties is not permitted in some states and the exclusions specified herein may not apply to you. This warranty provides you with specific legal rights. There may be other rights that you have which vary from state to state.

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The liability of SecurityMan Inc, arising from this warranty and sale shall be limited to a refund of the purchase price. In no event shall SecurityMan be liable for costs of procurement of substitute products or services, or for any lost profits, or for any consequential, incidental, direct or indirect damages, however caused and on any theory of liability, arising from this warranty and sale. These limitations shall apply notwithstanding any failure of essential purpose of any limited remedy.

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Introduction

Thank you for purchasing SecurityMan **PIR-SD**. The **PIR-SD** is a color camera with SD recorder hidden inside a PIR motion detector. This covert motion detector camera blends perfectly into almost any home or business environment where an alarm system might be present and can also be intergraded with any of our SecurityMan DIY Wireless Home Alarm Systems, providing you with both security and discreet monitoring capabilities. So whether you're looking to expand your wireless security system or just looking for a covert hidden camera, the PIR-SD will fit your needs.

Features

- PIR motion sensor with color camera and SD recorder (SD card not included)
- Works independently or can be integrated with any SecurityMan Air-Alarm series wireless alarm systems
- Up to 300ft (clear line of sight) wireless transmitting distance between the PIR-SD and alarm host (100ft indoors)
- 1-minute video clip per motion detection event
- Records up to 12 hours of video footage on a 32 GB SD card
- SD card full notification
- Audible and visual new file alert notification
- Can easily be armed/disarmed via remote control, alarm host keypad, or phone call (when integrated with a SecurityMan Air-Alarm system)
- One touch (remote control) manual record for emergency situations
- Easy PC playback using a PC card reader or direct connect via mini USB port

Important

This guide provides important information on the use and operation of your **PIR-SD**. Please read all the information carefully prior to using the product for the best performance and to prevent any damage/injuries or misuse of the device(s). Customers are entitled to have read through this complete user's manual before using the **PIR-SD**. Any unapproved changes or modifications will void your warranty. Please ensure to have a complete understanding of the following restrictions.

Please keep in mind the PIR-SD has a 2-sec delay time to record after an event occurred. To compensate for the 2-sec delay time to record and proper use, we recommend to install this product about 15ft away from the intended monitoring object. As part of our disclaimers it is the customers responsibilities to be aware of the 2-sec delay time to record before use.

Operating Restrictions

When using this product, the safety precautions below must be taken to avoid possible legal liabilities and damages. Retain and follow all product safety and operating instructions. Observe all warnings in the product operating instructions. To reduce the risk of bodily injury, electric shock, fire and damage to the equipment, observe the following precautions.

PLEASE NOTE that under certain circumstances, audio/video recording may be PROHIBITED by law. This device should be used only in compliance with all applicable federal, state and local statutes.

- **DO NOT** place this product near any medical equipments. Radio waves might potentially cause breakdown of electrical medical equipment. This product should be placed at least one foot away from any heart pacemaker. Radio waves might potentially influence heart pacemaker and lead to respiratory disturbance.
- **DO NOT** use this product to violate one's privacy. Monitoring one's private activities without consent is illegal and this product is not designed and manufactured for these purposes.
- **DO NOT** use this product for any illegal activities. SecurityMan shall not be responsible for any consequences of illegal conducts made by users.
- **DO NOT** put the plastic package bags in reach of children or babies. Young children can choke on these items if they put them into their mouths.
- **DO NOT** plug the AC adapter into the outlet in improper situations.
 - Plugging in an AC adapter with wet hands might cause electric shock.
 - Plugging in the AC adapter unsteadily might cause fire or electric shock.
- **DO NOT** cover the AC adapter when it is connected to an outlet, place the adapter near heaters, or put it on the floor which is equipped with a heater. The above mentioned operation might cause fire or incidents.
- **DO NOT** use it aboard; please abide by the airway's provision. It might influence communication aboard and the flying apparatus if departing from the airway's regulation. This will result in accident, possible death and severe physical hurt.
- **DO NOT** disassemble or repair the camera or other relevant peripheral equipments by yourself. Improper disassembly might cause damage to the product or the peripheral equipment.

- **DO NOT** put the camera in quaky paces. The camera may be unstable or out of operation if installed improperly. Such installation may also cause breakdown.
- **DO NOT** use the camera in complex environment, the obstruction of stumbling block will affect the electromagnetic wave and influence the receiving range. Wall, tree and other stumbling block might absorb, reflect the electromagnetic wave, and influence the receiving range.
- **DO NOT** use the camera in the places which are covered with metal. The around metal, such as elevator and cabin, might shield the electromagnetic wave, and result in inability to receive signals.
- **DO NOT** use the camera near aggressive chemicals.
- **DO NOT** place the product near any strong magnetic objects
- **DO NOT** disassemble the product.
- **DO NOT** shake or strike the product.
- **DO NOT** attempt to service the product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

The PIR-SD is designed to be, and acts as, a theft deterrent. This device cannot offer complete protection for your home or business. Like all practical systems, it has limitations and it could be disabled by a skilled intruder. We suggest that you avoid relying solely on PIR-SD to protect your property, but use it as part of a comprehensive security solution.

Conditions

Please read the following messages to make sure your working environment is suitable.

- The temperature should be kept between -10°C and 50°C (14°F to 122°F). The relative humidity should be kept between 20% and 80%.
- Avoid putting the product in places where temperature or humidity may change rapidly.
- Keep it dry, dustless and avoid exposure directly in sunlight.
- Keep product away from heat sources such as electric heater.
- It might influence the normal operation of the product if used at the fringe range of normal temperature. Please turn off the power when not in use.
- Please obey the local government's environment protection policy.

Safety Instructions

- Please read these instructions before using the product. This product is neither waterproof nor dust proof; therefore it cannot be used outdoors or in adverse environment.
- Please adopt original DC power supply, to avoid causing device damage or electric shock or fire.
- Unauthorized dismantlement of the device or replacement of device parts is forbidden. The manufacturer will not be responsible for any loss arising from such actions.
- Do not put the device into fire, oven or microwave oven, in order to avoid explosion.
- As a result of version changes, the user manual may be different from the actual product. Please take the actual product as the standard.

Package Contents

**SD card not included.



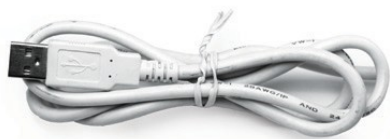
1 x PIR-SD w/Bracket



1 x Remote Control



1 x USB AC Adapters



1 x USB Cable



Screws



Plectrum (for Pairing)



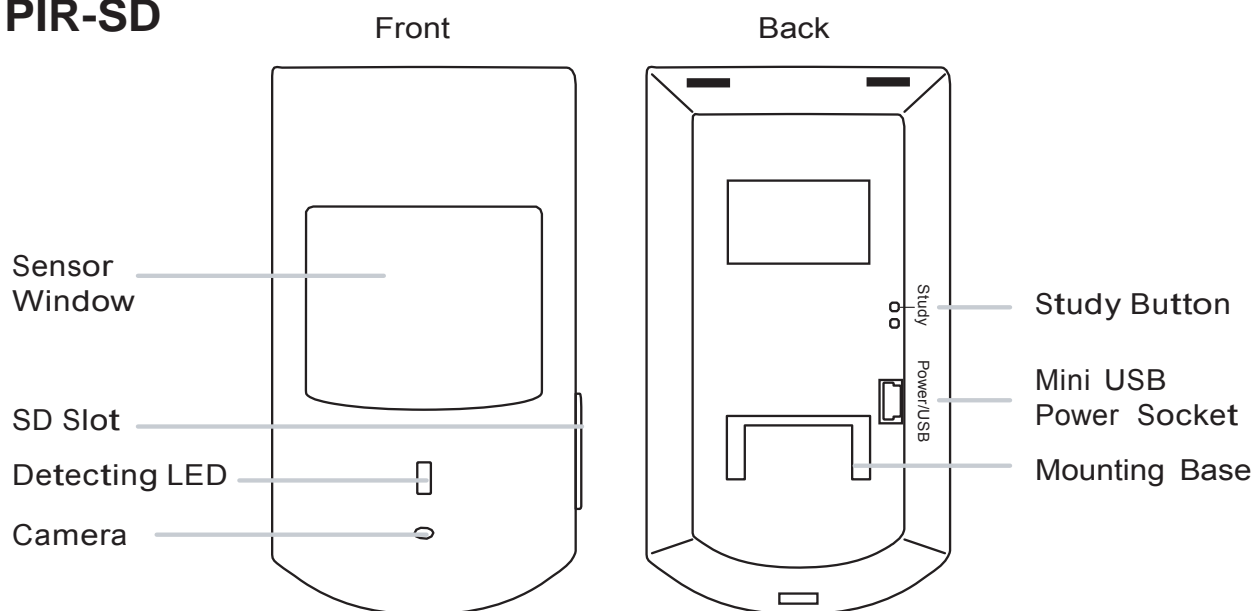
2x Warning Stickers



User's Manual

Product Basics

PIR-SD



Remote Control

Stop Record button

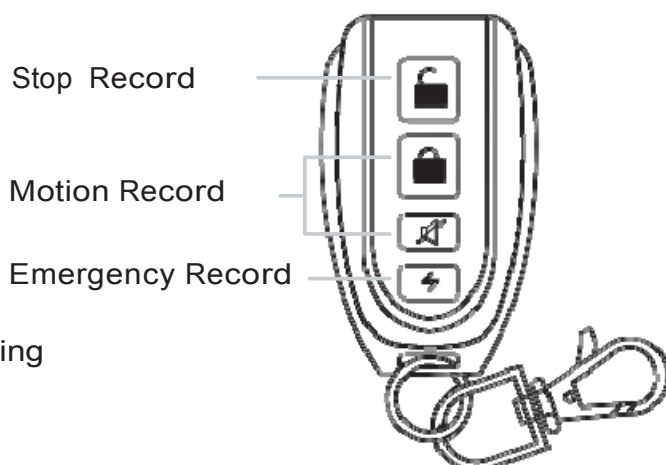
Stop/Deactivate Motion Detection and Emergency Recording

Motion Record button

Start/Activate Motion Detection Recording

Emergency Record button

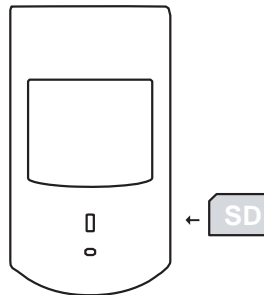
Start Emergency Record (1 minute clip)



Set Up

Set the Date and Time

Insert an SD card (note included) “face up” into the SD slot located on the right hand side of the PIR-SD as illustrated below.



IMPORTANT NOTICE: The PIR-SD required an SD card to be inserted into the SD slot in order for the PIR-SD to function as a motion detector/recorder.

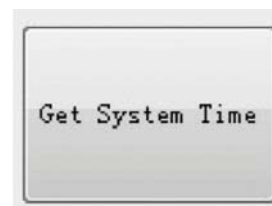
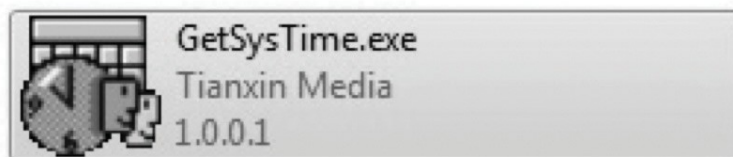
Connect the PIR-SD to your PC or Laptop using the USB cable provided as illustrated below.



Once connected, an “Auto Play” pop up window will appear (as shown below) providing various programs for you to use to access and view the stored files. Click on the “**Open Folder to View Files**” option to open a folder view as illustrated.

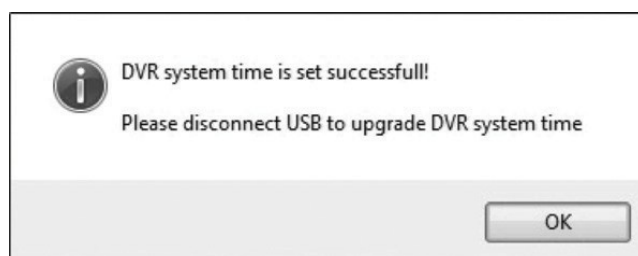


Double-click on the “GetSysTime” folder, double-click on the “GetSysTime.exe” file located on the SD card, and then click on the “Get System Time” pop up to synchronize your computers time to the PIR-SD. Make sure the computer you are using has the current time and date. If it is a newly formatted SD card, please copy and paste the “GetSysTime.exe” time/date setup file from other SD source or download it from our web site, http://www.securitymaninc.com/?page_id=575. Look for “PIR-SD” under the software column and click on the link to download the GetSysTime file.

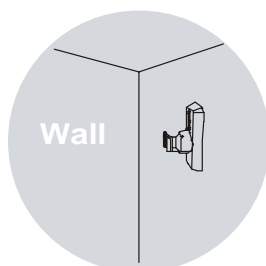


After clicking on the “Get System Time” pop up, a confirmation pop up will appear letting you know that the time and date were set successfully. Click OK to close the window and disconnect the PIR-SD from your computer.

NOTE: A “SysTime.bin” file will be created indicating that the date and time was set correctly.

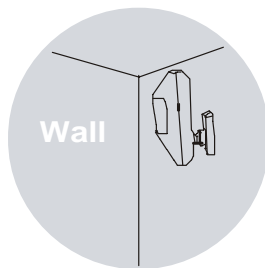


Mount the PIR-SD’s mouting bracket in the desired location and secure it to the wall using the screws provided (use the green dry wall inserts when applicable) as shown below.



IMPORTANT NOTICE: Due to a 2~3-sec delay time to record, we recommend to mount the PIR-SD about 15ft from the intended monitoring object for proper recording.

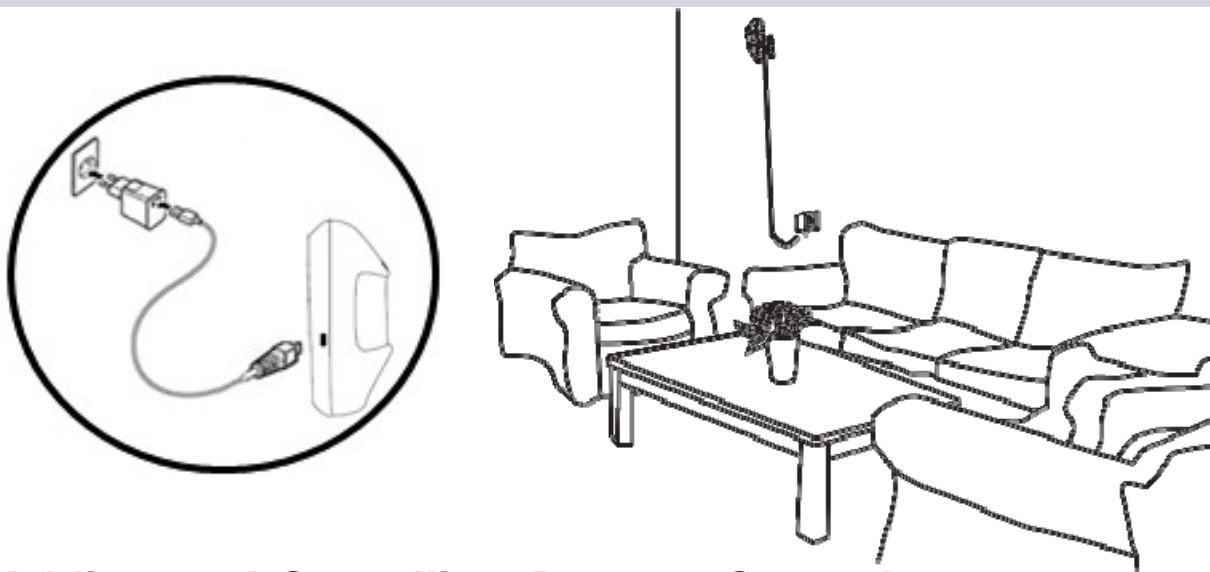
Slide the PIR-SD over the mounting bracket and push it downward to secure. Adjust the PIR-SD as necessary until you reach a desired viewing angle as shown below.



Finally, connect the PIR-SD to the USB power adapter and a solid red light will appear in the motion detection window for 30 seconds as illustrated below. After the red light disappeared, the PIR-SD is ready to use.

IMPORTANT NOTICE:

- 1) Please avoid unplugging the USB power from the PIR-SD to prevent the system Date and Time from resetting.
- 2) To playback the recorded files, we recommend to remove the SD card from the PIR-SD to playback on a media card reader due to important notice #1 above.
- 3) Since the PIR_SD does not have infrared to monitor in dark area, we would recommend to use night light or lamp stand in dark area.



Adding and Cancelling Remote Control

Adding Remote Control:

- 1) While plugged into the power outlet, press and release the “Study” button located on the back of the PIR-SD. The PIR-SD will beep once after being pressed indicating that it is in study mode.
- 2) Press any one of the four buttons on the remote control 2 consecutive times and the PIR-SD will beep 5 times to indicate the remote control has been successfully added to the PIR-SD.

Note: The PIR-SD will beep twice to indicate failure during the adding process and exit the study mode if the signal is not received from the remote control within 20 seconds. Please repeat steps 1-2 above if this should happen.

Cancelling Remote Control:

Press and hold down the “Study” button for 5 seconds and then release, the PIR-SD will beep for 3 seconds to indicate the remote control is successfully cancelled from the PIR-SD.

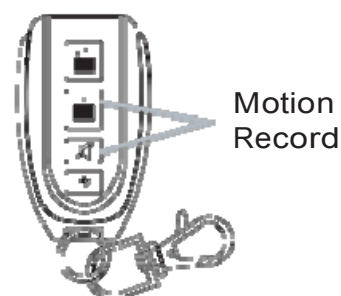
NOTE: Since the same command are used to cancel the remote control from the PIR-SD and disable the video recording from the Alarm Host (when integrating), it is important to remember to enable the video recording back (or pair video recording) to the Alarm Host whenever cancelling the remote control from the PIR-SD.

Operation

Using PIR-SD

Motion Detection Recording

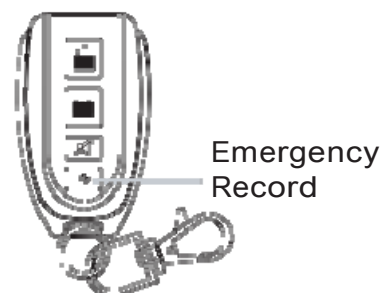
To Activate Motion Detection recording, simply press any of the “Motion Record” buttons on the remote control and the PIR-SD will beep once to indicate that motion detection has been activated in stand-by mode. Once activated and motion has been detected after the 8 seconds delay time to exit, the red LED will turn red to indicate recording. The PIR-SD will record a 1 minute video clip per motion detection event.



Note: The PIR-SD has a built in 8 second exit delay that allows the user to exit the detecting area (after activating motion detection) without triggering the PIR to record. Motion detection recording files will continue to accumulate if events re-occurs within the 1 minute recording period.

Emergency Recording

Press the “Emergency Record” button on the remote control (at any time) to start an immediate Emergency recording event. Once activated, the red LED will become solid (while recording) and the PIR-SD will record a 1 minute video clip per emergency recording event.



Stop Recording

To stop emergency recording or Deactivate Motion Detection recording, simply press the “Stop Record” button on the remote control at any time (the PIR-SD will beep twice to indicate that recording has been stopped).



New File Alert

After deactivating motion detection or emergency recording, by default the “New File Alert” featured:

- Blue LED will stay solid for 5 seconds.
- PIR-SD will beep 5 times.

To disable the PIR-SD from beeping 5 times. Make sure the PIR-SD is disarmed. Press both the “DISARM + ARM” buttons once simultaneously and the PIR-SD will beep 3 times to disable the PIR-SD from beeping 5 times on “New File Alert” notification.

Press both the “DISARM + ARM” buttons once simultaneously again and the PIR-SD will beep 4 times to enable the PIR-SD to beep 5 times on “New File Alert” notification.

NOTE: To manually mute the new file alerts, press the Stop Record button 3 times rapidly within 5 seconds or simply activate motion or manual recording. “New File Alert” notification will always displayed a solid blue LED for 5 seconds regardless of the beeping “New File Alert” notification.

SD Full Alert (Memory Full)

The Blue LED will start to flash continuously whenever the SD card becomes full. Please remove the SD card from the PIR-SD and back up all recorded events to a PC or Laptop to free up space.

NOTE: The Blue LED will also start to flash continuously whenever the SD card is not present. Please insert an SD card into the SD card slot.

The SD Full notification flashes whenever there are 1 minute or 60MB of the free capacity left for system buffering. The PIR-SD system does not have an overwrite feature.

Playback Recorded Video

You can playback recorded files directly from the PIR-SD (when connected to a PC) or directly from the SD card by inserting the card into your computers card reader. To playback recorded video on a PC:

1. Remove the SD card from the PIR-SD by gently pushing on the SD card allowing it to pop out from the SD card slot.
2. Insert the SD card into an SD card reader (not included) connected to your PC (your PC should load the SD card as a new Removable Drive).
3. When prompted, select the **“Open folder to view files”** option to view its contents, you should see two folders labeled SYSTEM and VIDEO.

Open the **VIDEO** folder to view a list of all the recorded events. Once inside the video folder you can double-click any of the recorded AVI files and the video will begin playing in your default AVI media player.

NOTE: To playback video footages, we recommend to remove the SD card from the PIR-SD to playback. Using method 1 to connect the PIR-SD via USB cable for playback is strongly NOT recommended. Once the PIR-SD is powered on, if for any reasons the power were to be unplugged from the PIR-SD, the Date and Time will auto reset to default date/time. When this occurs, please remember to setup the Date and Time before the next operation.

Integrating with Air-Alarm Series

To fully integrate the PIR-SD system with the Air-Alarm Host series, there are three components that needs to be added. Adding the PIR-SD remote control (Not a must), the PIR-SD motion detection sensor, and the

video recording (on/off) as shown below. To avoid using multiple remote controls when integrating the PIR-SD to the Air-Alarm host series, please add the PIR-SD remote control to the Air-Alarm host series or vice versa.

Adding PIR-SD Remote to the Alarm Host

Step 1: Press **PRGM/SET + Password** (system default 888)+**ENT+70+ENT+00+ENT** [the “ \rightleftharpoons /Learn” light will appear solid blue/red].

Step2: Press any 1 of the 4 buttons on the PIR-SD remote twice consecutively to add.

Cancelling PIR-SD Remote from the Alarm Host

Step1: Press **PRGM/SET + Password** (system default 888)+**ENT+71+ENT+00+ENT** to cancel.

NOTE: Please reference the Air-Alarm series user’s manual as needed on how to add remote controls. Adding the PIR-SD remote to the Alarm Host series is not a requirement, only pair them if you want to use one remote to control both the PIR-SD and the Alarm Host.

Adding PIR-SD Motion Detection to the Alarm Host

Make sure the host is “DIS-ARMED” and press:

Step 1: **PRGM/SET + Password** (default is 888) + **ENT+ 70 + ENT + XX + ENT** [Input zones 11~15 for XX indicating the 2nd defense line dedicated for PIR sensors]
(The “ \rightleftharpoons /Learn” light will appear solid blue/red)

Step 2: Provoke the motion sensor on the PIR-SD 2 consecutive times to add.

Cancelling PIR-SD Motion Detection from the Alarm Host

Make sure the host is “DIS-ARMED” and press:

PRGM/SET + Password (default is 888) + **ENT+ 71 + ENT + XX + ENT**
[Input zones 11~15 for XX indicating the zone number that the PIR-SD were paired to and using code 71 to remove the PIR-SD will remove all

(up to 4 sensors) sensor that was paired to that zone.]
(The “↔/Learn” light will appear solid blue/red)

The alarm host will beep twice, and the “↔/Learn” light will flash once to indicate the PIR-SD motion detection is successfully cancelled from the Alarm Host.

Enabling Video Recording

To enable video recording, please follow steps 1 and 2 below. Enabling video recording allows the PIR-SD to start recording video footages whenever the alarm system are triggered by 24hrs devices, by other sensors that are pre-paired to the Alarm Host or by the PIR_SD.

Step 1: Press the “Study” button on the back of the PIR-SD
(PIR-SD will beep once).

Step 2: On the Alarm Host Press: **ESC + Password** (default is 888) + **ENT + ESC + Password** (default is 888) + **ENT**. The PIR-SD will beep 5 times indicating the video recording has been successfully enabled. PIR-SD will beep 2 times to indicate failure; please repeat steps 1-2 above.

IMPORTANT NOTICE: Enabling video recording when integrating with **SM-8808T** or **SM-8808E** Air-Alarm Hosts will have a 2-sec or 3-sec delay time to record respectively due to processing speed. Please note that it is normal for the PIR-SD to have a 2~3-sec delay time to record. It is very important and our recommendation to mount the PIR-SD 15ft from the intended target for proper monitoring view and proper recording. Please be sure to thoroughly test the recording and camera angle before fixing the PIR-SD.

Note: Study mode will automatically turned off if inactive for more than 20 seconds. During Alarm Host series 40-sec exiting delay time, the PIR-SD will continue to record if motion is detected.

Disabling Video Recording

Make sure the host is “DIS-ARMED” and press:

Press and hold down the “Study” button on the back of the PIR-SD for 5 seconds, then release, and the PIR-SD will beep for 3 seconds to indicate video recording is successfully disabled.

NOTE: Since the same command are use to remove the remote control from the PIR-SD and disable the video recording from the Alarm Host, please pair the remote control back to the PIR-SD whenever disabling video recording from the Alarm Host.

After the PIR-SD has been successfully added to the Alarm Host series, the PIR-SD should function in the same manners as the motion sensor only PIR-SD has the video recording feature. If the PIR-SD is triggered by motion in Armed mode, it will alarm the Host and at the same time the Alarm Host will send a signal to the PIR-SD to start the video recording process. Moreover, if any of the input sensing device(s) that are pre-programmed to the Alarm Host triggered at anytime to alarm the host, the PIR-SD will process video recording.

Note: To review the recorded video footages, please follow “Playback Recorded Video” section above.

Specifications

PIR sensor/ camera	Image Sensor	1/6.5"CMOS color
	Resolution	640x480
	Recording Speed	30fps
	Camera Lens	8mm
	Camera Viewing Angle	H: 60 degree, V: 35 degree
	Recording Video Format	AVI
	Recording Time and Size	One minute per motion detection event. 40MB/minute. 32GB = 12hrs of video
	LED Indicator	2 LED lights (Red: power, record, alarm/ Blue: SD full or new REC file)
	USB Port	2.0 (data transfer to PC or USB power adapter)
	Video Storage (SD slot)	SD card (up to 32GB, SD Class 4 or higher)
	PIR Detecting Area	110 degree * 26ft (8M)
	Min. Illumination	1Lux/F1.2
	Pet Immunity	22lbs(10kgs) or less
	Power Consumption	≤ 60mA (standby); 110mA (active)
	Power Supply	110-240VAC, 5VDC 1.0A(USB)
	Dimensions	4.3"x2.4"x1.7"
	Gross Weight	0.5 lbs
Remote Control	Operating Power	27A 12V battery (alkaline)
	Remote Control Distance	30ft
	Battery Life Time	Up to 2 years
	Buttons	Stop, Motion Detection, and Manual Record
Wireless (General)	Frequency	433Mhz
	Transmission Distance	Up to 300ft (in open area); Up to 100ft (indoors)
	Operating Temperature	-10°C to 50°C(14°F to 122°F)
	Operating Humidity	≤ 85% RH

Note: 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 or more 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.

FCC Statement:

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.

NOTE: THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

