

VIR-101

Weatherproof VMD - Infrared Motion Detector w/ Color CCD

# security labs

New  
**VIR**  
Technology

## MOTION DETECTION

- VMD-PIR motion detection technology (Patent Pending)
- False alarms are virtually eliminated by dual confirmation
- 132 point Video Motion Detection (VMD) grid
- Programmable object velocity and size
- Menu - Set - Enter switches
- Dual element pyroelectric PIR detector
- Unique power detection monitoring also eliminates false alarms caused by power fluctuations or loss of power
- VIR motion detection coverage:
  - Range: 25'
  - Area covered at 25': 18' horizontal, 13' vertical
- PIR only coverage angle: 110 degrees
- VMD only coverage angle: 40 degrees

## CAMERA

- 1/4" Color IR Reactive CCD Imager
- Resolution: 420 lines
- Iris: auto electronic
- Light sensitivity: 0.001 LUX (IR on)
- Automatic IR illumination in low light
- Audio: internal condenser mic
- Video / audio can be used for central station alarm confirmation
- Kit includes:
  - 12VDC power supply
  - 50' cable
  - Swivel mount
  - Mounting hardware



## VIR-101 Weatherproof VMD - Infrared Motion Detector w/ Camera

False alarms are one step closer to being solved with the creation of the VIR-101 Video/Infrared Dual Motion Technology (Patent Pending) alarm activation device from Security Labs, Inc. The VIR-101 combines the best of both worlds of Passive Infrared and Video Motion Detection into one smart device. The limitations of both technologies are overcome by combining their strengths in a serial format. Each element must agree on the cause for activation before an alarm output trigger is generated. Historically, passive infrared motion detectors have been plagued by false triggers from sudden heat changes or movement just outside of the desired detection zone. Video motion detection, while being able to accurately target a detection zone, can be false triggered by changes in lighting. By summing the detection devices inside of this unit, accurate detection zones without false triggers are now possible. A grid of 132 video motion detection points can be selected ON or Off to establish an exact field of coverage. IR LEDs for night vision and a stylish weatherproof case design make the VIR-101 extremely versatile. Also available with a B/W CCD sensor (VIR-100).

## SETTING THE COVERAGE ZONE

Unlike other motion detection devices on the market, the VIR-101 can be set with a video monitor. Adjust the camera angle to view the area to be protected. Areas in the coverage zone that should be removed from detection are set with the on screen VMD dot grid (see below).



Security Labs  
**VIR-101**

## MOTION DETECTION SETTINGS

**1 - Object size (level sensitivity):** This setting determines how large an object must be in order to trigger the VMD. The larger this value is set, the larger the moving object must be in order to trigger the VMD. This can be used to set the VMD to ignore pets, such as a cat or dog, but still detect movement of larger objects, such as people or vehicles.

**2 - Object Velocity (temporal sensitivity):** This setting determines at what speed an object must be moving in order to trigger the VMD. The larger this value is set, the slower an object must be moving in order for it to be detected. A larger setting of this value will cause the VMD to ignore things like fast moving cars, lightning strikes or other flashing lights but still detect slower moving objects such as people. A smaller setting will cause the VMD to ignore slow moving objects, but still trigger on fast moving objects.

**3 - Detection Area of 132 zones (12x11grid):** This setting allows the user to select which areas of the screen will respond to motion and which areas will ignore it.

## PROGRAMMABLE INTERFACE

Each of the customizable settings can be configured using the 3 button interface and an on screen display driven menu system.

**Button 1** = enable/disable menu system

**Button 2** = select/deselect value

**Button 3** = increase/decrease value

Values for object size and object velocity are displayed in bar graph form. These values range from 0-9. The motion detection zones are configured by scrolling through the 12x11 grid one location at a time and selecting each individual zone as enabled or disabled.

## OUTPUT OPTIONS

The VMD and the PIR can be independently enabled or disabled through the on screen menu. If both PIR and VMD are enabled, an alarm output will only occur if BOTH the VMD and the PIR detect motion. If only PIR or only VMD is enabled, an alarm output will occur only if the selected method of detection is triggered. If both methods are disabled, no alarm outputs will occur under any condition.

## POWER PROTECTION/MONITORING

A "Brown out" detection feature prevents false triggers from occurring during power fluctuations, undervoltage situations, overvoltage situations, or total loss of power.

Setting the VIR-101 protection area is as simple as adjusting the camera angle. The image in the monitor is the motion detection zone. Areas in the zone (where known activity will occur) can be deactivated in the setup menu.



MOTION DETECTION SETUP GRID