

IP Cameras

Victoria Raspberry Pi Makers & Others

Andrew Ross

IP Cameras: Surveillance



Why IP Cameras

Why do we use them?

- cannot be present physically
- cannot be present all the time

IP Cameras are really time & space machines



SV3C SV-B01-1080PL Bullet POE Camera

<http://www.sv3c.com/POE-IP-Camera.html>

<https://www.amazon.com/gp/product/B01G1U4MVA>



SV3C SV-B01-1080PL Bullet POE Camera



SV3C SV-B01-1080PL Bullet POE Camera



SV3C SV-B01-1080PL Bullet POE Camera

HomeMediaParametersSystemDownload Player | Logout

Camera

Video ▶

Image ▶

OSD ▶


OSD Options

Time Stamp: ☒ On ☐ Off

Camera Name: ☐ On ☒ Off

Font Size:

Name:



Apply

Cancel

D-Link DCS-930L

<http://support.dlink.ca/ProductInfo.aspx?m=DCS-930L>

<https://www.amazon.com/gp/product/B00452V66G/>



D-Link DCS-930L



D-Link DCS-930L



D-Link DCS-930L



D-Link DCS-930L

Product: DCS-930LB1

Firmware version: 2.00

D-Link

DCS-930LB1

LIVE VIDEO

SETUP

MAINTENANCE

STATUS

HELP

Camera

Logout

Language :
English

CAMERA

This section shows your IP camera's live video. You can control your settings using the buttons below.
Current resolution is 640x480.


FUNCTION

☐ ActiveX ☐ Java

LIVE VIDEO

peep

02-12-2014 11:34:09 PM



SURVEILLANCE

Copyright 2010 - 2014, D-Link Corporation / D-Link Systems, Inc. All rights reserved.

Foscam FI8918W

<https://www.foscam.com/product/9.html>

<https://www.amazon.com/gp/product/B0046710G6/>



Other cameras

- Raspberry Pi Camera V2 – 8MP
- USB



IP Cameras: What to look for

- web server for viewing & configuration
 - pull out video stream and/or individual jpeg
 - check reviews/comments for compatibility with Blueiris, Ispy, Zoneminder
- ~~mobile app~~
 - view feed and configure without app
- ~~features: upload, notify, etc~~
 - security risks
- night vision / IR LEDs
- cheaper than RPi
- weather-proof package

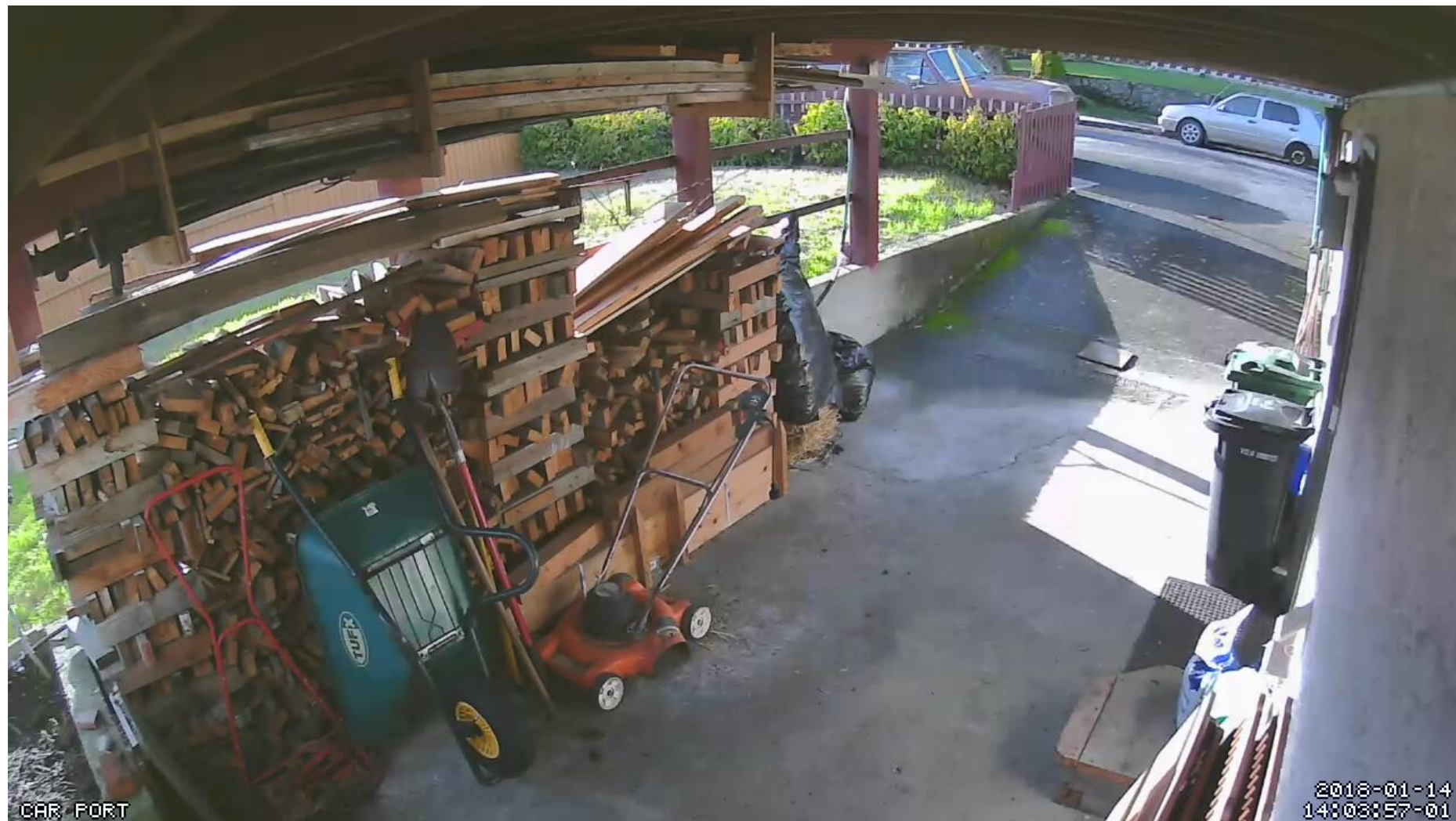


In practice

- installation
 - cables: power / network (PoE)
 - network: wireless / ethernet
 - IR LEDs cannot be covered
- additional utilities
 - rotate config files
 - change contrast on webcam
- security
 - turn off all features
- configuration
 - deal with daily deluge of images
 - cars reflect light, shadows / clouds
- legal



Bright sun



Headlights



Bug trails



Software options

- **motion:** <https://motion-project.github.io>
 - **motioneye:** <https://github.com/ccrisan/motioneye>
 - **motioneyeOS:** <https://github.com/ccrisan/motioneyeos>
- **zone minder:** <https://zoneminder.com>
 - **RPi-Cam-Web-Interface:** <https://elinux.org/RPi-Cam-Web-Interface>
- **Kerberos.io** <https://kerberos.io>
- **openCV:** <https://opencv.org> (build your own)

IP Cameras

