



www.sfsafe.org

(415) 553-1984



**SAFE and SFPD
recommend the use of
Closed Circuit
Television System
for Video Surveillance**

CCTV relies on strategic placement of cameras, and observation of the camera's input captured on monitors.

DISCLAIMER

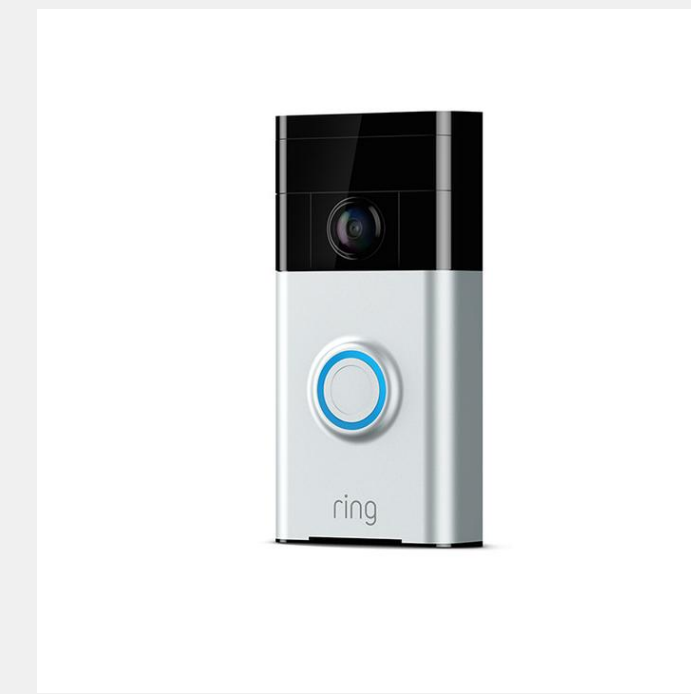
The information provided is intended to assist you in improving the overall level of security of your home or property. It is not intended to replace existing or proposed security measures.

SAFE and SFPD do not endorse any particular company and their cameras.

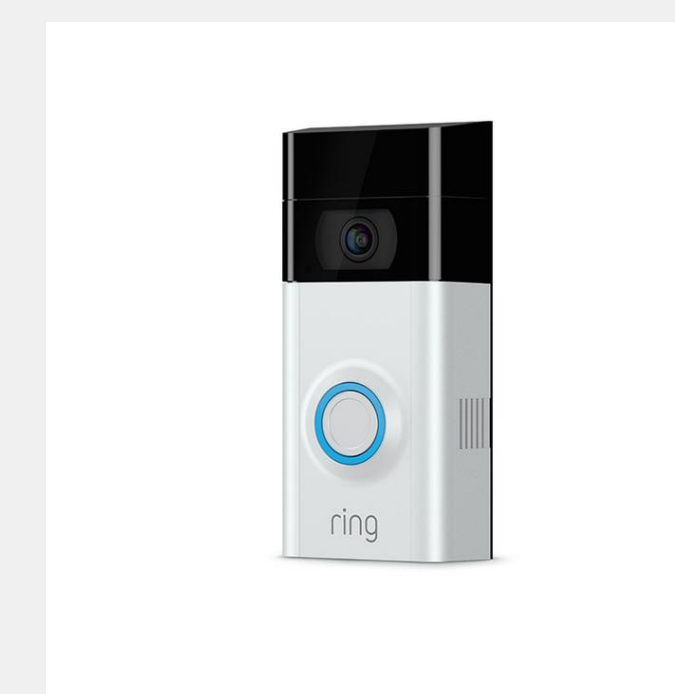
The cameras found on this document are the most commonly used for residential dwellings.

RING SYSTEM

www.ring.com



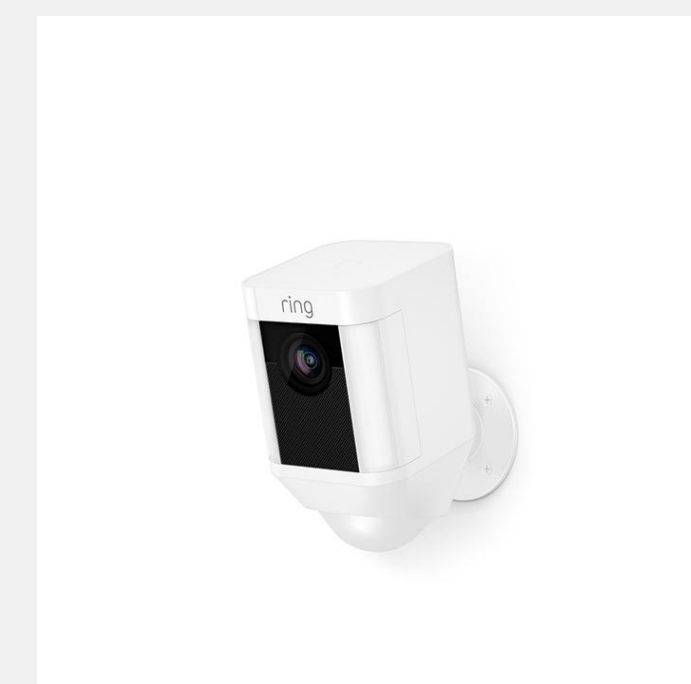
(Basic) Video Doorbell
Battery-powered



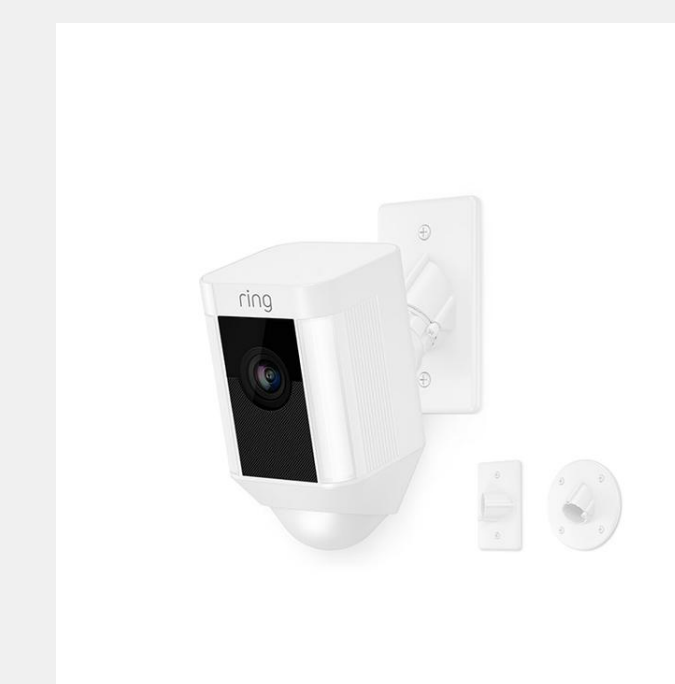
Video Doorbell #2
Quick-release battery



Pro
Hardwired



(Basic) Spotlight Cam
LED spotlights and siren



Mounted Hardwired
LED spotlights and siren



Alarm Security Kit
(Not Central Monitored)

RING PROTECTION PLUS

Professional monitoring with cellular backup, plus unlimited video recordings.

NEST

www.nest.com



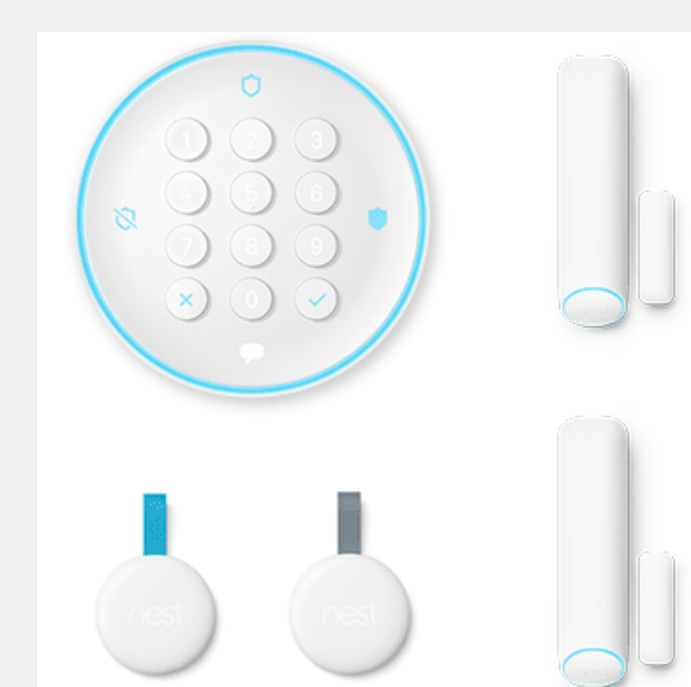
NEST Cam Outdoor
Hardwired



NEST Cam Indoor
Hardwired



NEST Hello Doorbell
Hardwired



NEST Alarm System

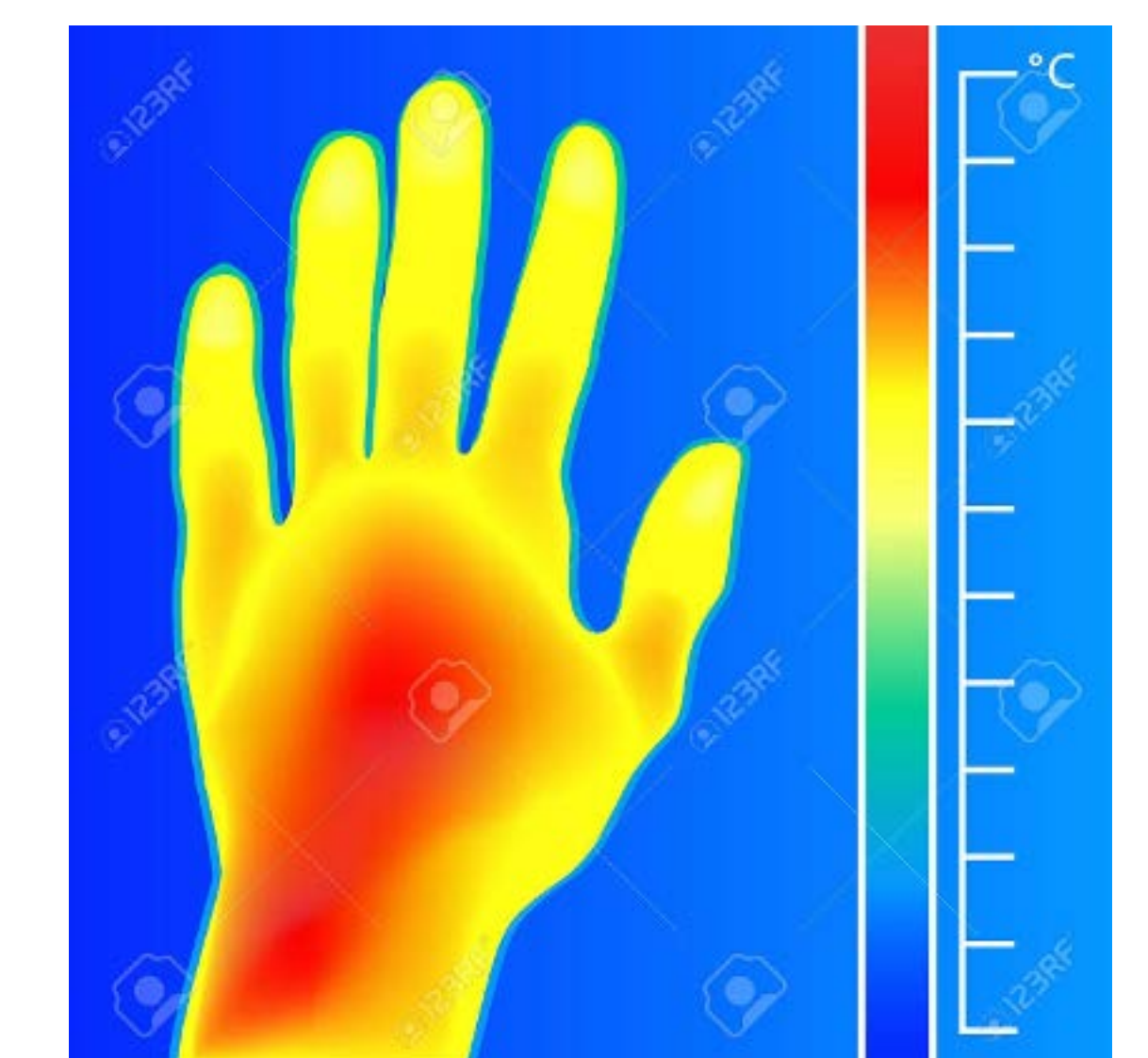
NEST AWARE

Monthly subscription for
24/7 Continuous Recording
Intelligent Alerts
Clips and Timelapses
Activity Zones



HIGH RESOLUTION

If you connect your camera to a DVR or other device, it will also need to be HD Compatible.



INFRARED (IR)

Built-in IR cut-switch that automatically enables/disables the infrared depending on the light conditions.

IN THE KNOW

The camera's viewing angle determines how much space the camera will cover. Wider angled lenses help cut down the # of cameras required for overall coverage. Video Surveillance should be utilized at your property with at least one camera facing towards the address street and camera should be registered with the District Attorney's office

REGISTER YOUR CAMERA
sfdistrictattorney.org/register-your-camera



Amcrest.com (CCTV)

FEATURES

- View and Record in wide-screen from remote viewing
- Pre-Installed 500GB Hard Drive (expandable) up to 3TB
- Longer recording times (up to 30 days) available with use of motion detection and/or resolution adjustments
 - IP 66 indoor/outdoor weatherproof cameras
 - 24 LEDS for night vision



Arlo Pro 2 (Arlo.com)

FEATURES

- Works with Alexa for voice control
- Flexible powering options use wire-free, plugged in
 - 7 Days of Cloud Recordings
 - 855 nm LEDS for night vision(25 ft)
- Arlo Smart adds powerful intelligence to your cameras. Customize alerts to detect people, specific zones, and contact first responders right from your smart phone's lock screen (optional service, includes 1-month trial)

Overview

Note: The following information is specific to commercial and retail establishments; however, can be applied to any location utilizing video surveillance.

Basic set up and maintenance problems can reduce the effectiveness of many systems.

- Resolution – is it good enough for facial recognition.
- Camera position – are they positioned for clear view of suspect.
- Lighting – is it adequate to capture clear images both day and night.
- Image detail – is the recorder set up for best image detail.
- Maintenance – are you maintaining your system properly so it can do its job when needed?

Set Up and Maintenance

- **Backlighting** – when sun is bright at doorway, images in front appear darker or even black. Use another light source inside to counteract back light.
- **Low Frame Rate** – saves on drive space and gives better image quality, but you may not get an image at all (now you see him; now you don't).
- **Obstructions** – displays and other objects blocking view **should be eliminated**.
- **Focus Problems** – must check system regularly to prevent.

Minimum camera resolution should be **480 horizontal lines**.

Good cameras have **faster lenses** (allows more lighting), larger maximum **aperture** opening (lets more light into the focal point of the camera) and controls image brightness (allows brighter images in dim lighting) – the more lighting, the more depth of field (greater depth of field; the more of the scene is in focus).

Focal Length – some cameras zoom in and out while others have a fixed focal length. The type of cameras used depends on what your needs are.

Transaction Areas – anything at a transaction point (cash register, toll booth, etc.), the subject's head should fill at least 15% of the total image in the frame, giving the detail you need.

Lines of Sight – lines of sight are always critical, make sure there are no obstructions.

Site Plan – the right site plan is crucial (retail store blueprint or **diagram**). Key camera spots are at transaction points (cash registers and entry/exit points) – the more cameras, the better.

You want good camera **overlap** (you want multiple chances to capture good images). Extra coverage is also needed for aisles, restrooms and other key points.

Camera Height – placement is very important, make sure it is as close to eye-level as possible. Otherwise, you might lose out to a baseball cap.

With a good site plan you can make sure you don't have any blind spots (you can toy around with camera positions, and do a test recording to see that you are getting what you want).

Interior Lighting – interior lighting can balance bright light from one direction (back lighting) by adding another light source from a different location (add a bank of lights).

Example: Artificial lighting (**inside store**) for cameras may be good in the morning, but by noon, the sun (through a doorway or window) can blow the entire frame out (add lighting to fill in for afternoon sunlight). Adding more light from a different direction balances lighting, giving better camera clarity (if sunlight is shining through large windows you can tent windows or add screens).

Exterior Lighting – if lights are on timers, you must adjust appropriate to seasonal changes (Fall/Winter: gets dark earlier. Spring/Summer: gets dark later).

For more information please contact San Francisco SAFE | Phone - (415) 553-1984 | Email - info@sfsafe.org