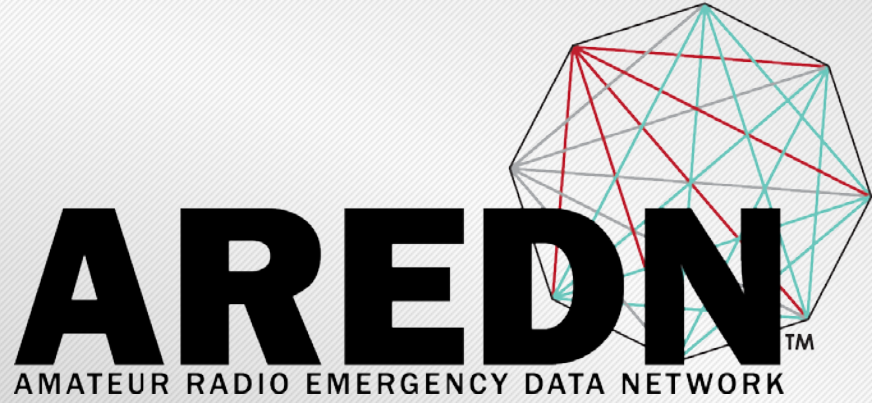




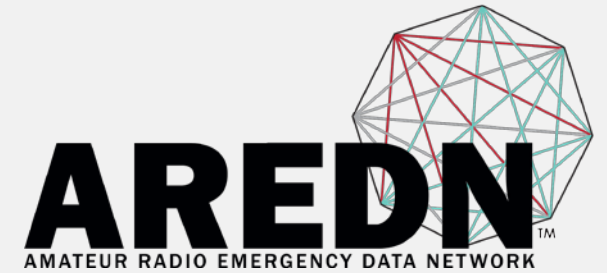
AREION™

AMATEUR RADIO EMERGENCY DATA NETWORK



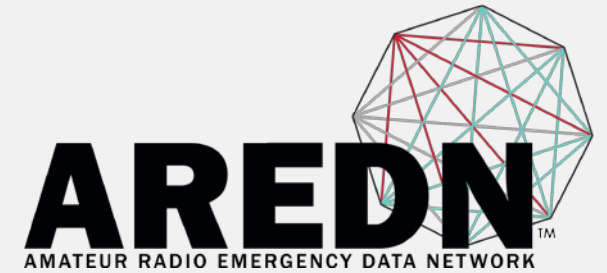
Camera Tips

Selecting A Camera



- Consider the use case carefully. Will a fixed camera work better than a PTZ camera?
- Look at the environmental specifications - IP65, safe operating temperature range etc.
- Consider camera support for RTSP and ONVIF
- Does the camera rely on Windows, ActiveX or other specific drivers or specific browsers? Will all of your target audience be able to access the camera with their browsers and computers?

Selecting A Camera



- Review the Browser support before purchasing to understand the limitations. Manufacturers are focusing on cell phone apps (requires internet) and ONVIF client support. Access from a browser is often limited to only Internet Explorer with older plugins that require virus detection to be circumvented (problematic to get working).
- Consider using Blue Iris for camera feeds

Deploying and Operating A Camera



- Default settings in ipCams can be 4Mbps @ 30 fps video streams. An HD video picture is still great at 1Mbps @ 15 fps and less. Don't flood the network looking for that perfect video. Tune the video quality to be "good enough".
- Consider using onboard SD cards are recommended to capture any video in support of community activities. It is preferable to send your SD card to court rather than your presence and testimony.
- Five or more video streams are possible over single links, but this would require each hop, e.g. down a street, to use different channels through a relay node. If an entire event uses one channel with many cameras and links, capacity will be limited as only one link can transmit data at a time (CSMA).

Deploying and Operating A Camera



- Community events bring masses of people with cell phones and RF noise. Expect to over engineer the links to do video -- clear line of sight, part 97 only channels, max SNR. What worked fine before the event, may not work during the event.
- With Pan-Tilt-Zoom (PTZ) cameras, setup the 'saved' locations. Event staff may need to quickly view event incidents. Some cameras have 'tour' mode to setup timing and scan locations.

Deploying and Operating A Camera



- Turn off Microsoft and other automatic updates during the event (or ensure everything is fully updated before hand) if your mesh network has a gateway to the internet. Inevitably, a big update will bring your laptop to a crawl.
- Reach out to local hams and vested individuals with relationships to establish access to strategic camera locations for the event -- Parking locations, building tops, poles, fences, etc.

Live Demo



- Sunba 1080p HD, Model 601-D20X