Denali-MC End-to-End HDR ISP

Sensor Interface

Lens

Image Sensor → Gain Offset Comp / Manual BP → Auto Exposure → Noise Suppression → Pixel Correction → Stats, Histogram SNR, etc.

Pixel Correction → Denali-MC HDR Variable Frameset Output + DOL → Sharpening

ultraHDR Video Processing

Locally Adaptive Tone Mapping → Veiling Glare

Locally Adaptive Tone Mapping → Demosaic → CCM → AWB → Gamma → Concurrent Video/Still HDR → HDMI

© 2017 Pinnacle Imaging Systems

Potential Use Application Denali-MC Concurrent HDR Video/Still

| Triggering Event | Concurrent HDR Video and Still Begins Recording | Mobile App Routes Lower res HDR Image-PSAP Operator | PSAP Op. Instantly Sees HDR Image | Police Dispatch Sees HDR Image from PSAP | Code 3 - Burglary in Progress is Initiated |
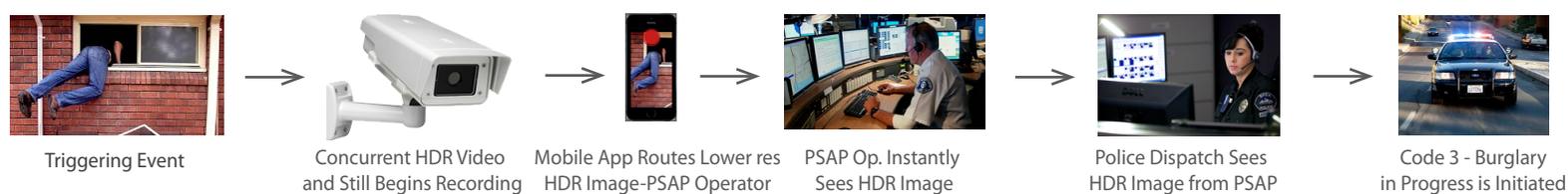
React! IP From Pinnacle Imaging Systems

React! - is a powerful capture mode within Pinnacle Imaging System's Denali-MC end-to-end HDR surveillance ISP platform that has the potential to empower home and SMB owners to initiate a tactical law-enforcement response to a potential burglary or intrusion. It's based on the fastest transfer of visual evidence to Public Safety Answering Point operators. With a mobile app, this high quality visual evidence package enables PSAP operators to provide law enforcement dispatchers tactical visual information for them to respond to a burglary in progress, and not a false alarm activation.

At the heart of React's! powerful capture IP is the capability to provide a 1080p/60, true 100 dB HDR video stream and without disrupting the stream, it concurrently produces full resolution, HDR still images that are user selectable for interval, duration and resolution. The parameters can be preselected, then automated into the system. For example, a down sampled lower resolution HDR image can be transferred quickly to the user's mobile device. This image can be pushed via an app to PSAP operators who can forward the HDR image to local law enforcement for tactical awareness.

Most police will not react quickly to a home or SMB based solely on a text or verbal alert. They need to have better tatical information that there is a burglary in progress with visual information. Police love React! because it provides the highest possible evidence package for conviction.

* Requires mobile app - not included but can be developed by Pinnacle

React! Getting the Bad Guys Off the Street

- 1080p / 60 HDR video stream
- 100+ dB range - actual, not theoretical
- MFSO HDR methodology – DOL for HDR video only
- Concurrent HDR still image capture – user selectable for interval, duration and resolution
- Full Resolution capable
- Automated after parameters are set by user
- Does not interrupt HDR video stream
- Sony Starvis, low illumination IMX290LQR, Xilinx Zynq 7000
- Near IR capable with IR LED illumination

Pinnacle Imaging's Custom Solutions Development

Pinnacle Imaging Systems can customize a HDR camera solution for you. Pinnacle's imaging scientists and engineering implimentation teams can produce a customized camera solution utilizing one of the 29 HDR capable sensor types on various logic and compute platforms including FPGA, ASIC, DSP or DSP+SoC or ARM. We also develop custom algorithms for implimentation in camera systems. We're affordable and timely.

Ask for a demo or for more information contact our support team at:
www.ultraHDRvideo.com
Tel: 650-740-1557
or contact: ron@pinnacleimagingsystems.com

Pinnacle IMAGING SYSTEMS