# Pixon's ExDRA™ Enables Cell Phone Cameras to "See in the Dark"

Patented Extended Dynamic Range Architecture offers significantly higher performance than Pixel 3 Night Sight mode and other cell phone techniques; ExDRA combines high-resolution images of bright objects with high-sensitivity images of faint objects, performing equally well with still images and video
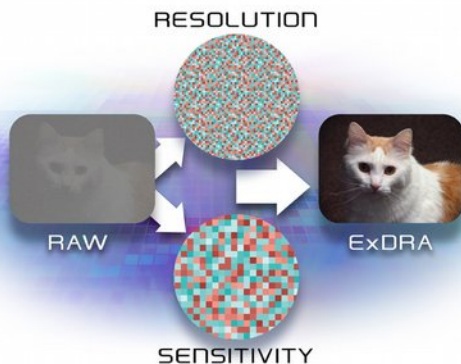
Poway, CA—December 6, 2018—Pixon Imaging, a technology development firm specializing in real-time image and video enhancement announces the availability of its new Extended Dynamic Range Architecture (ExDRA™) - an innovative software technique that dramatically improves low-light-level imaging in cell phone and other CMOS/CCD - based cameras. The technique utilizes charge binning, combining a full megapixel image of bright objects with a higher-sensitivity binned image of faint objects, all performed in one frame time. ExDRA delivers outstanding low light performance that is an order of magnitude (or better) than current methods.

[Click here to download a hi-resolution JPG of this image]

For example, Google's new Pixel 3 "Night Sight", employs up to 15 images to improve low-light sensitivity. This mimics the sensitivity of a longer exposure, but requires stationary objects, and cannot approach the sensitivity of the algorithmically simpler ExDRA. Alternative performance improving methods employed by other cell phone manufacturers require the use of multiple cameras, adding hardware costs and software complexity.

"The ExDRA technique captures both the high-resolution and high-sensitivity images simultaneously from a single CMOS/CCD sensor," reports Rick Puetter, Pixon's Chief Scientist. "This makes it possible to produce images and videos of scenes in low light with exceptional clarity and uniformity."

ExDRA is comprised entirely of software and is well suited for integration into next generation mobile phone cameras. It can also be implemented as an App, with little lead time, for use with existing devices.

About Pixon Imaging

Headquartered in Poway, California, Pixon Imaging develops software and hardware products based on the patented Pixon Method for deblurring and denoising images. The company's technology base includes proprietary algorithms for contrast enhancement, dehazing and noise reduction. While focusing on real-time video image processing in particular, Pixon technologies are equally applicable to still-image and off-line video processing. Pixon Imaging is a Micro USA, Inc. company.

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