



# INTRODUCING IQ TUNING: BUILDING ON TWO DECADES OF OPTICAL INNOVATION

Leveraging two decades of unparalleled expertise in wide-angle optics, sensor fusion, and image processing, our new IQ tuning service delivers unrivaled customization and quality, giving your product the competitive edge it deserves.



# BEYOND ORDINARY: WHAT SETS IMMERVISION APART

- **In-Depth Expertise:** With over two decades of experience, Immervision is a global leader in computer vision, known for our unparalleled knowledge in the field.
- **Multi-Industry Recognition:** Our expertise extends across various industries, giving us a deep understanding of diverse needs and challenges.
- **Customized Image Quality:** We excel in tailoring image quality to your specific requirements, optimizing results based on your unique applications.
- **Balancing the Entire Vision System:** Immervision knows how to achieve the ideal equilibrium between hardware and software components, guaranteeing exceptional results for your projects throughout the entire image pipeline.
- **Global Fortune 1000 Experience:** We've been developing vision systems for device market leaders worldwide, making us a trusted partner in achieving your vision system goals.

# UNLOCKING INDUSTRY-SPECIFIC SOLUTIONS



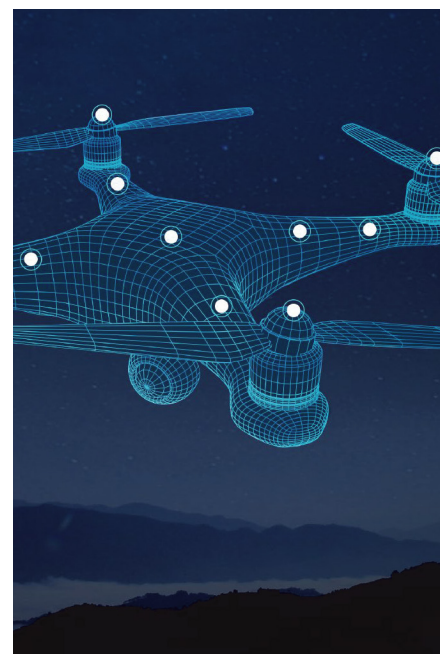
## Mobile Phones:

Immervision, a leader in computer Vision, partners with renowned mobile manufacturers to revolutionize user experiences. Our cutting-edge algorithms and calibration techniques not only enhance visual quality but also optimize processing and power consumption, making us the ideal choice for IQ tuning on any device.



## Automotive:

Collaborating with ODM and OEMs, we excel in optimizing image quality for ADAS, In-Cabin, and Mirror Replacement applications. Our tailored solutions, backed by extensive expertise, ensure that we can fine-tune IQ for any device, meeting specific requirements while optimizing costs.



## Drones and Robotics:

Immervision's unmatched expertise extends to drones and robotics imaging, where precision is paramount. Our collaboration with experts, including the DIU, enables devices to capture high-quality visual data, even in challenging low-light environments. We bring our experience to IQ tuning for various devices, ensuring exceptional results.

# OPTIMIZING VISION SYSTEMS: OUR HOLISTIC APPROACH

Our IQ tuning solutions optimize images for both, human perception, and machine analysis, ensuring clarity and precision across applications.

Discover the 5 essential elements that will provide you with a competitive edge:

## 1. Optimizing Your Camera Performance

The perfect camera strikes the right balance between excellent picture quality, speed, ease of use, and size. We evaluate how well a camera performs in real-life situations, both for taking still photos and capturing moving scenes. We assess key performance factors such as the time it takes to capture a photo, focus speed, and startup time.

**When it comes to videos and previews, we focus on three crucial aspects:**

**Exposure:** How quickly and smoothly the camera adjusts to different lighting conditions.

**Auto White Balance:** How effectively it manages colors when the lighting changes.

**Auto Focus:** How rapidly and accurately it focuses, even when refocusing isn't necessary.

## 2. Providing Support Throughout the Supply Chain

In addition to IQ tuning, we offer comprehensive production support. Our experts assist from the design phase to mass production, ensuring consistent image quality. We also serve as your link with suppliers, ensuring seamless collaboration and top-tier image quality throughout the supply chain.

## 3. Delivering Camera-Agnostic IQ Tuning

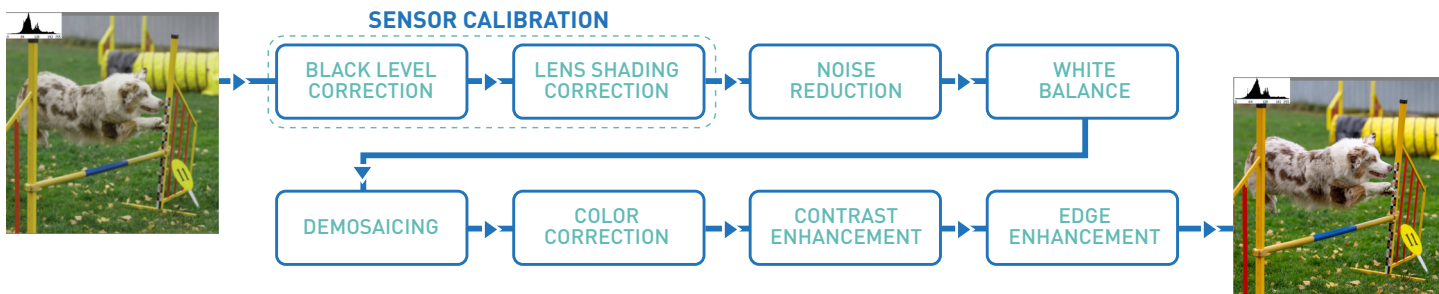
Our expertise lies in enhancing image quality for vision systems, whether they use a single camera or multiple cameras with different configurations. We cover various industries, including automotive, drones, PC, security, and more, to ensure tailored top-notch image quality.

## 4. Leveraging Expertise Across Multiple ISPs

The Immervision IQ Tuning team has extensive experience with leading Image Signal Processors (ISPs) like Qualcomm, Intel, GeoSemi, TI, Ambarella, and others. With our deep ISP knowledge, we optimize every aspect of the pipeline to guarantee exceptional image quality by utilizing all ISP capabilities.

## 5. Developing End-to-End Software Solutions

We possess skills in driver and low-level software development, enabling us to provide a complete solution from platform setup to finely tuned images. This holistic approach ensures seamless integration, superior performance, and optimal image quality in your product.



# OUR COMPREHENSIVE IQ TUNING OFFER

## 1 Image Quality Verification and Certification:

- Objective and subjective image quality verification.
- Precise testing with custom plans to match real-life usage.
- Pre-certification based on industry standards like VCX, DXO, CPIQ, P2020.
- Detailed camera benchmarking for competitive positioning.

## 2 Customized IQ Tuning Solutions:

- Tailored solutions to meet your unique project requirements.
- Collaborative approach aligning with your vision and objectives.

## 3 Advanced Algorithms and Calibration Tools:

- Cutting-edge tools and algorithms.
- Constantly evolving to incorporate the latest innovations.
- 20+ years of expertise optimizing image features.

## 4 Images for Human Consumption vs. Machine Vision Consumption:

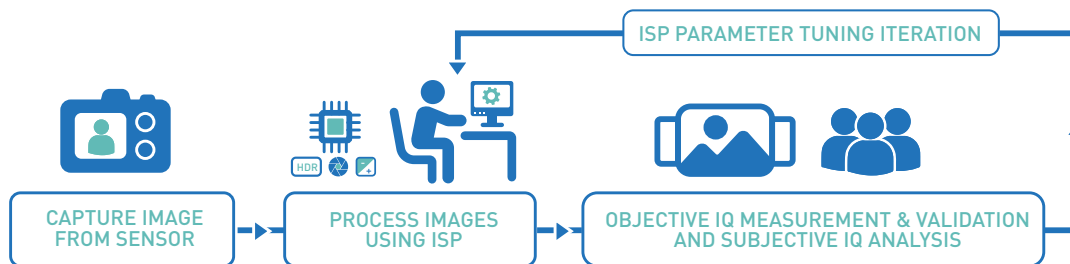
- Human Consumption: IQ tuning maximizes visual appeal for human viewers, emphasizing factors like color balance, sharpness, and detail enhancement.
- Machine Vision Consumption: Optimizing images for efficient analysis by computer algorithms through techniques like pre-processing, noise reduction, and edge enhancement.

## 5 Quality Assurance and Consistency:

- Rigorous quality checks throughout the IQ tuning process.
- Consistently exceeding industry benchmarks.

## 6 Seamless Integration and Timely Delivery:

- Efficient integration into existing workflows.
- Timely project completion without compromising quality.



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