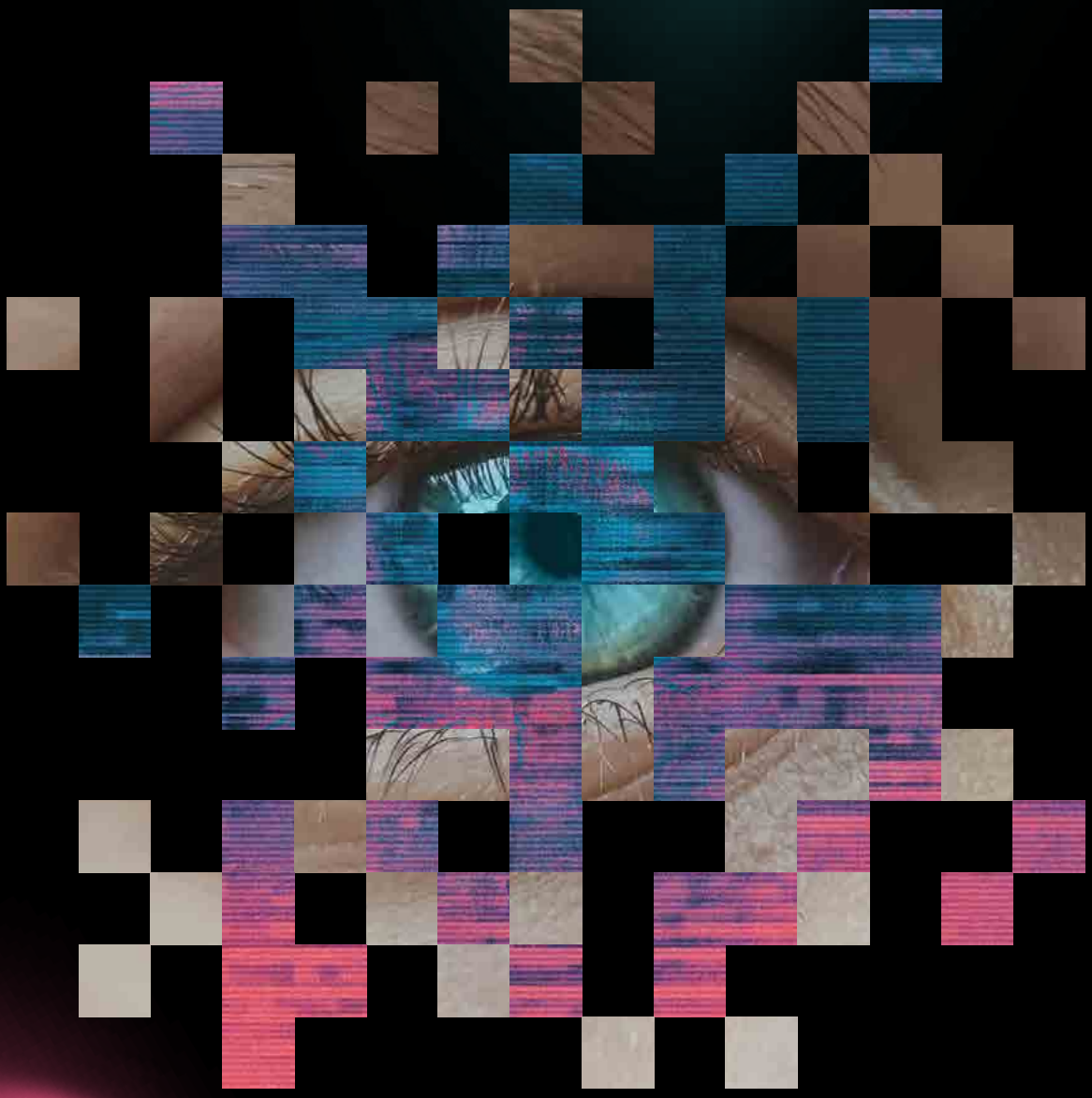
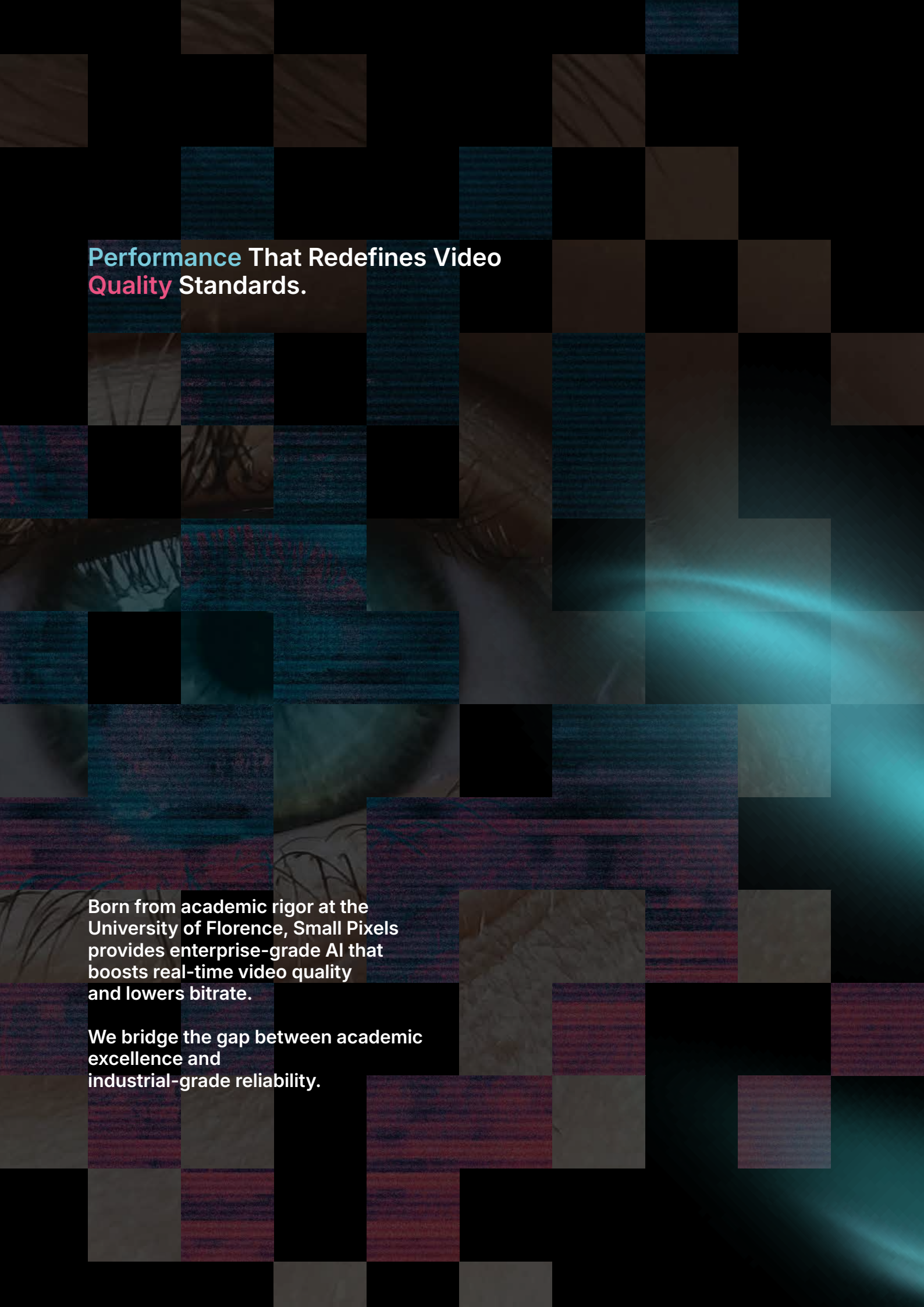
SmallPixels

Smart AI Processing for Video Quality Enhancement



SPAIQ Stream | SPAIQ ScaleUp | SPAIQ FramFlex | SPAIQ Linq | SPAIQ Archive



Performance That Redefines Video Quality Standards.

Born from academic rigor at the University of Florence, Small Pixels provides enterprise-grade AI that boosts real-time video quality and lowers bitrate.

We bridge the gap between academic excellence and industrial-grade reliability.

SmallPixels

THE COMPANY

AI Designed for Real-Time Performance, Everywhere.

Small Pixels develops AI-driven video software based on proprietary neural architectures.

Our technology combines computer vision, machine learning, and human-visual-system modeling to deliver adaptive performance across servers, PCs, mobile devices, and embedded hardware.

Vision

To be the invisible layer behind a more efficient and sustainable digital video ecosystem.

Mission

To redefine video quality through AI, enabling higher perceptual performance with lower resource consumption across global workflows.

THE TECHNOLOGY

SPAIQ: Small Pixels AI for Video Quality Enhancement



SPAIQ is our proprietary AI framework engineered to process video signals at the source.
By reinforcing structural integrity and motion dynamics before compression, it optimizes every dimension of the signal to deliver superior efficiency and high-fidelity quality without disrupting your pipeline.

Specialized Intelligence

Adaptive Models for Every Content Type.

Generic AI applies one rule to everything. Small Pixels works differently. We offer a suite of specialized neural networks designed for different content types, allowing you to leverage the most effective model for your specific visual needs.

Sports
Stability for fast-moving action.

Cinema
Fidelity for textures and grain.

Nature
Precision for organic details.

Animation
Clarity for gradients and edges.

Surveillance
Visibility in critical conditions.



WHAT SETS US APART

Performance That Redefines Video Standards.

Lab-tested. Crowd-validated.
Real-world proven.

1 **Independent Integration**
Runs before encoding.
No pipeline changes required.

2 **Content-Aware Precision**
Specialized models tailored to each context.

3 **No Hallucinations**
Restorative AI that respects the source signal.

4 **Proprietary Architecture**
Built from the ground up.

5 **Data-Secure by Design**
Real-time processing with zero content retention.

6 **Infrastructure Agnostic**
Works with any codec (AVC, HEVC, AV1...) and hardware.

7 **Fast Deployment**
As a pre-processing layer, integration takes minutes, not months.

SPAIQ Stream

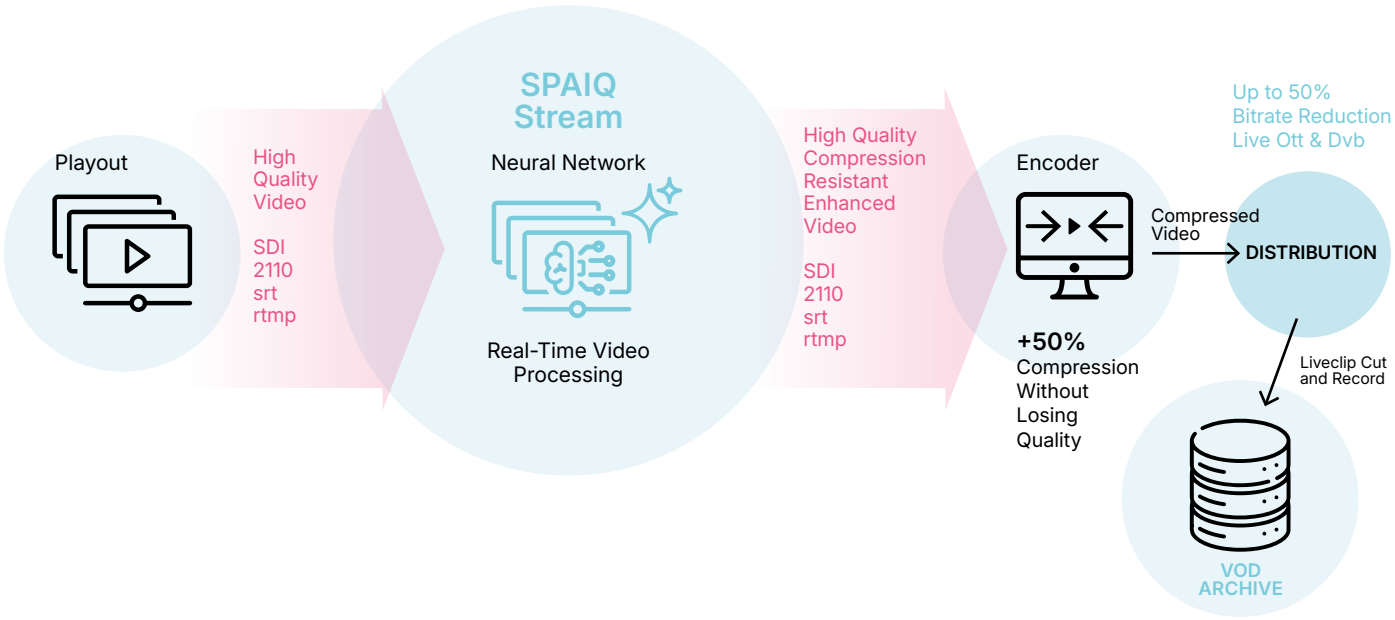
Half the Bandwidth, All the Beauty.

The Intelligence Before the Encoder.
SPAIQ Stream is a real-time AI pre-processing layer that optimizes video quality before encoding. By reinforcing signal structure and cleaning artifacts at the source, it makes the video more compression-resistant.

This allows existing infrastructures to deliver sharper, high-fidelity video for both Live and VOD workflows, while reducing distribution and CDN costs by up to 50%.

Designed for live environments, it operates with sub-100 ms latency and is fully pipeline-agnostic, supporting any codec (AVC, HEVC, AV1) and input (SDI, 2110, NDI, SRT). Our restorative AI guarantees no hallucinations, restoring only original textures and details.

DISTRIBUTION BANDWIDTH REDUCTION





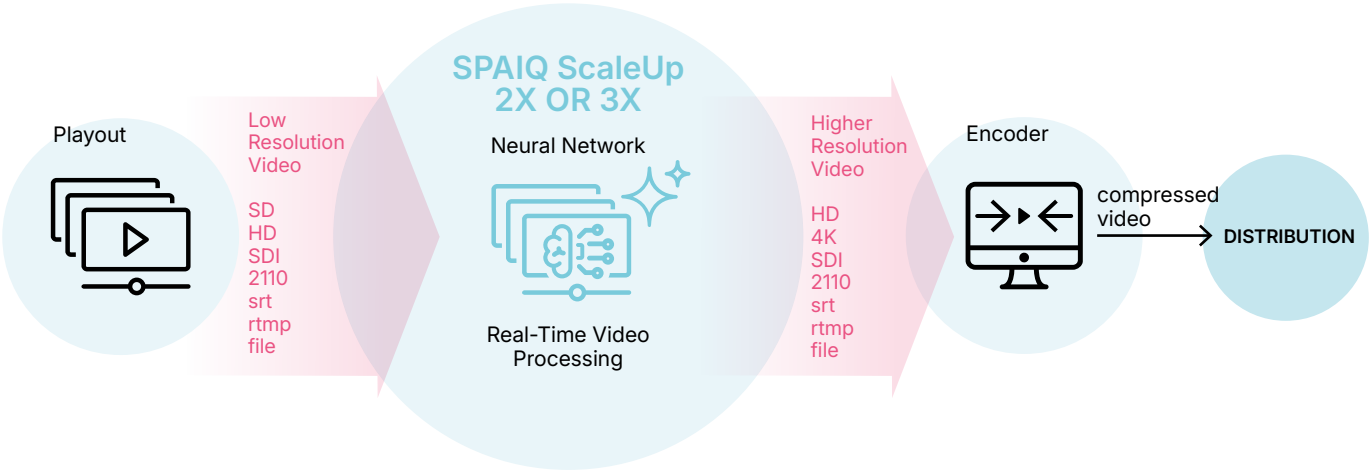
SPAIQ ScaleUp

High-Definition Intelligence, Real-Time Clarity.

Beyond simple interpolation. SPAIQ ScaleUp uses advanced neural networks to reconstruct missing information and increase resolution by 2x or 3x while preserving the structural integrity of the original footage. Unlike traditional upscaling, it avoids blurry edges and digital noise, delivering clean, sharp results.

Whether upgrading legacy streams or pushing HD content to 4K, SPAIQ ScaleUp runs in real time with less than 100 ms latency. Flexible deployment and content-aware models ensure optimal enhancement with a “No Hallucination” guarantee: restoring existing textures without adding artificial details.

RESOLUTION UPSCALING





SPAIQ FrameFlex

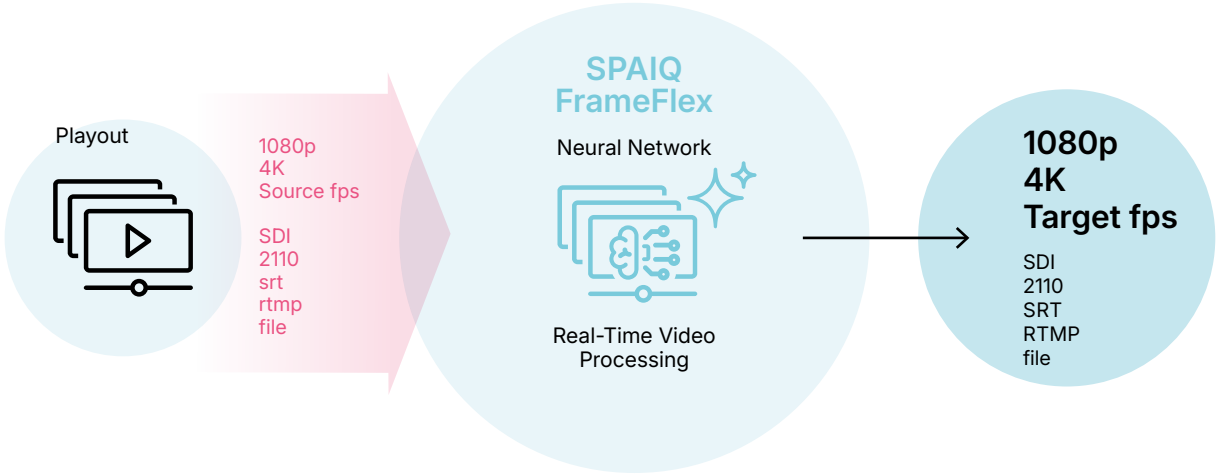
Fluid Motion, Zero Artifacts.

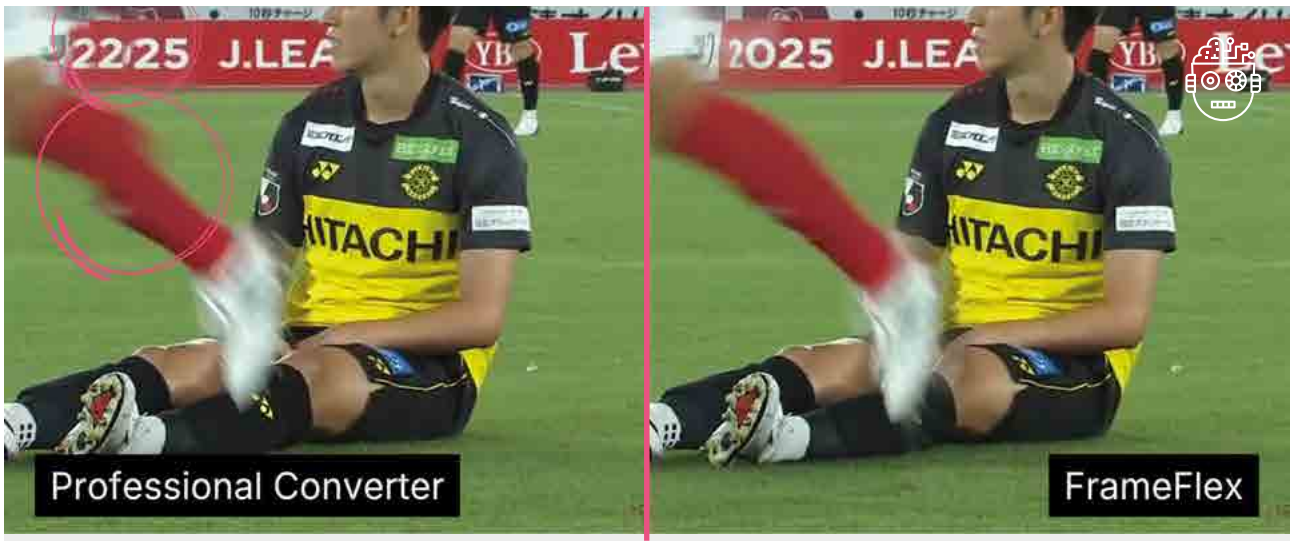
SPAIQ FrameFlex redefines motion with broadcast-grade smoothness using neural motion understanding to generate intermediate frames physically consistent with the source. It eliminates judder and motion blur in real-time with ultra-low latency, making it the ideal solution for live sports and high-action content where temporal stability is non-negotiable.

Designed for professional pipelines, it provides seamless standards conversion, such as PAL to NTSC or 25 fps to 60 fps, delivering superior fluid motion without the "soap opera effect" or warping artifacts. It is fully encoder-agnostic and respects the physics of motion across all global standards, providing a stable, high-fidelity output that preserves the original signal's quality without infrastructure redesign.

The technology can also be used to create high-quality **slow-motion replays**, generating intermediate frames that deliver smoother and more natural motion without requiring dedicated high-speed capture systems.

FRAME RATE CONVERSION

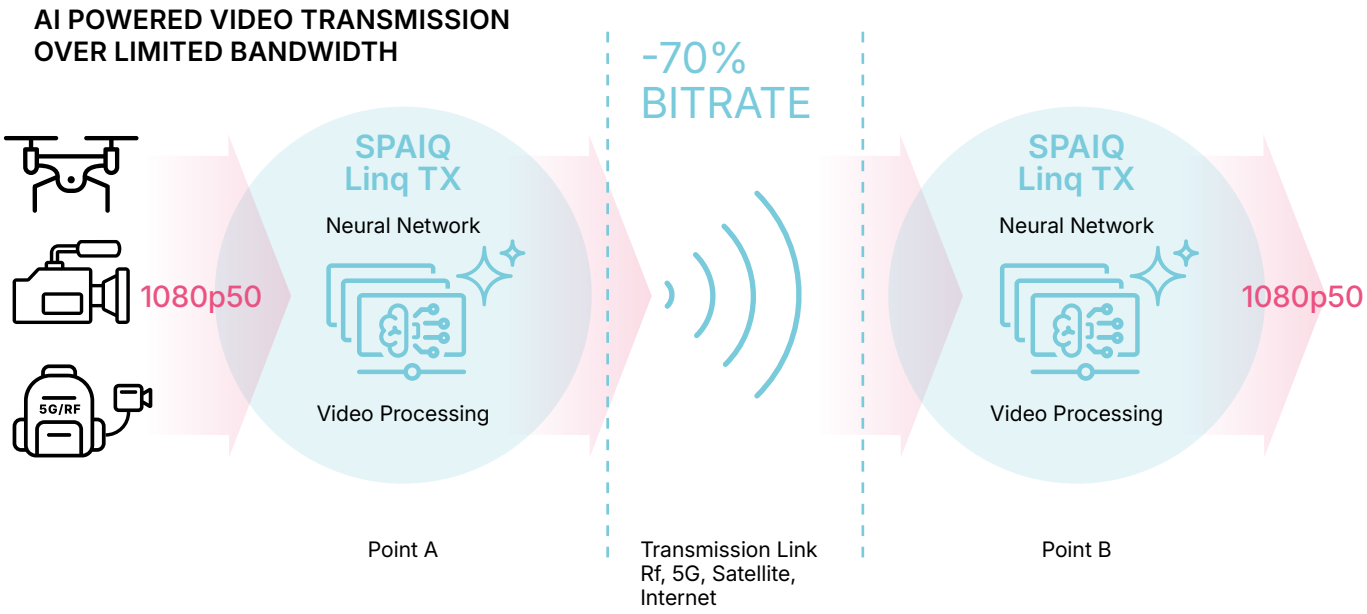




SPAIQ Linq

AI-Powered Video Transmission - Beyond Network Limits.

SPAIQ Linq is a dual-ended AI software platform that enables high-quality video transmission over constrained and volatile networks. Rather than relying solely on traditional compression, it intelligently optimizes video at the source and reconstructs visual information at the destination using real-time metadata and proprietary neural networks. Designed for broadcast contribution, defense, surveillance, remote production, and other mission-critical workflows, SPAIQ Linq enables organizations to deliver higher-quality video with ultra-low latency while preserving existing codecs, encoders, and transmission infrastructure. It transforms bandwidth-constrained networks into reliable, high-performance video transport systems.





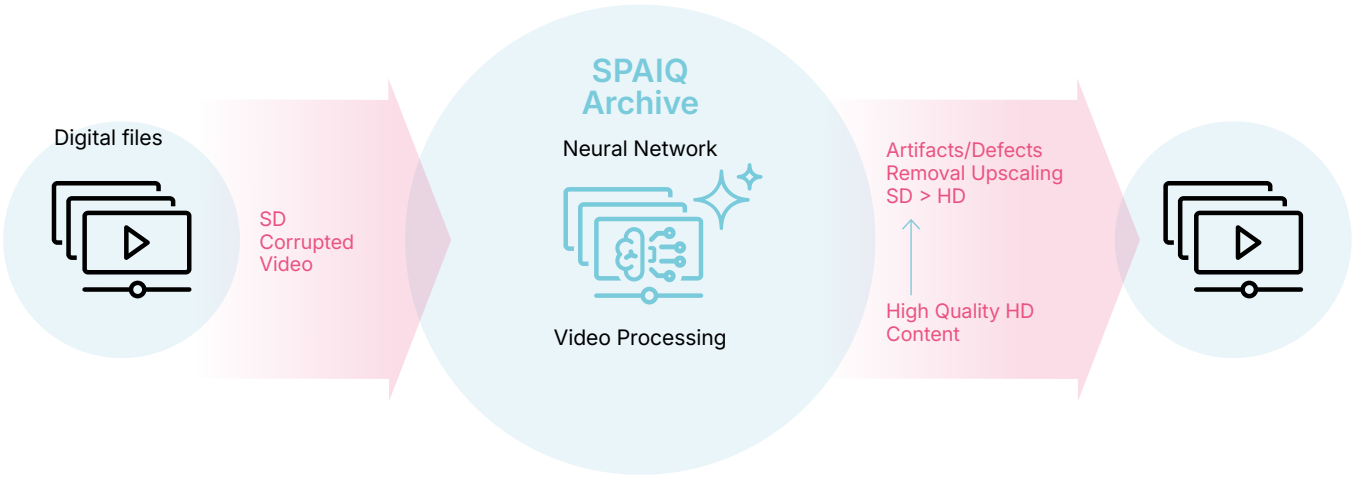
SPAIQ Archive

Modernizing history at scale.

SPAIQ Archive is a restoration engine designed to transform legacy content, from VHS to early digital formats, into high-fidelity assets ready for modern HD and 4K standards. By combining deep research with production-ready AI, it restores clarity and structural integrity to your library, making old footage look as if it were filmed today.

It removes artifacts, noise, dust, and stains, supports automated batch processing at scale. It is powered by adaptive models and ensures True-to-Source integrity, preserving directorial intent without adding fake details.

VIDEO CONTENT RESTORATION





Efficiency with Purpose.

Sustainability is not an add-on; it is a direct outcome of our engineering. By reducing bitrate requirements at the source, Small Pixels lowers the energy consumed across the entire video delivery chain, from data centers and CDNs to end-user devices.



–50%
Bandwidth

Lower Energy Consumption

Lower Carbon Footprint

SmallPixels

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Small yet Beautiful.