

REAL-TIME IP VIDEO PROCESSING AND DELIVERY WITH ZIXI

APPEAR INTEGRATES ZIXI'S SOFTWARE-DEFINED VIDEO PLATFORM TO TRANSPORT BROADCAST QUALITY VIDEO THROUGH ITS X-SERIES SOLUTIONS

AT A GLANCE

APPEAR SOLUTIONS WITH ZIXI INTEGRATION

- **X PLATFORM** – A high-capacity, versatile, ultra-low latency platform for high-speed video networking, enhanced IP security and advanced compression bespoke design for the remote production, contribution and distribution markets.

KEY FEATURES

- High-capacity, low latency platform with firewall functionality and limitless network video applications
- The platform is built around flexible modules where each can be reprogrammed to enable different applications and keep the amount of hardware to a minimum
- State-of-the-art security and redundancy while reducing signal delay and power consumption
- Modular and customizable
- Deployed world-wide in cable, satellite, terrestrial and IPTV applications
- The most powerful and efficient video processing unit on the market

In a dynamic broadcast environment, video providers require a scalable and cost-effective way to process and distribute live and on-demand video in multiple formats for viewing on multi-screen devices. This requires the tools to enable the delivery of unique visual communication products around the globe.

DESIGNING, DELIVERING AND PRODUCING WORLD-CLASS EQUIPMENT SOLUTIONS FOR THE DELIVERY OF GLOBAL VIDEO SERVICES

Since 2004, video services provider Appear has been dedicated to producing and optimizing the most versatile real time video processing platform on the market. Their flagship **Appear X Platform** is a modular and customizable chassis deployed world-wide in cable, satellite, terrestrial and IPTV applications, and used for encoding, transcoding, decoding, modulation/demodulation, scrambling/descrambling, and multiplexing across a multitude of applications.

The X Platform interfaces all commonly used media such as IP, satellite modulation and demodulation, and can be placed and add value anywhere in a video network. The X Platform has been designed with state-of-the-art security and redundancy so it can be used from anywhere content is generated all the way through to final customer distribution.

APPEAR PARTNERS WITH ZIXI TO GROW THEIR ALL-IN-ONE SOLUTION FOR VIDEO NETWORKING, SECURITY, AND ADVANCED COMPRESSION

Appear's partnership with Zixi sets the industry standard for exceptional video delivery by enabling customers to deliver broadcast quality video over IP with lowest latency at the highest quality. By making the public internet viable for broadcast-quality video transport, Zixi helps Appear adapt to changing customer needs, reach additional users, and is particularly useful for users looking to use the internet as their primary or backup contribution or video networking link. This is a cost effective and reliable alternative to satellite or dedicated fiber for contribution links using Appear's existing infrastructure.

Furthermore, the X Platform together with Zixi serves as a single box gateway solution for customers that need Zixi for the internet and ST2110 for their local network. The box can remain on the network and perform conversions between physical formats and digital formats, as well as convert one format to another.

By solving for ultra-low-latency video networking and remote production over IP capabilities that customers are demanding around the world, the addition of Zixi support enables the X Platform to carry on solving many of the challenges facing modern broadcast network design today and tomorrow.



The Appear X20 Platform (2 RU) provides high-speed video networking, enhanced IP security, ultra low latency encoding & transcoding for remote production, contribution, distribution, and OTT.

EFFICIENT BROADCAST-QUALITY DELIVERY OVER ANY IP NETWORK

KEY ZIXI BENEFITS

- **Reliability** – Contribute source streams with 99.9999+% broadcast reliability; hitless failover provides redundant transmission options for higher reliability and disaster recovery
- **Low Latency** – With network adaptive Forward Error Correction and recovery, proven sub 1 second live linear latency
- **Security** – Zixi provides best-in-class security enhanced with DTLS and AES standards-based protection
- **Interoperability** – Zixi is compatible with the largest ecosystem of encoding devices and contribution sources
- **Centralized Management** – ZEN Master can provide a centralized view of the entire Zixi-enabled contribution and distribution network

ABOUT APPEAR

Appear is a leading provider of media processing and delivery technology. Headquartered in Oslo, Norway and with customer in over 100 countries, Appear provides the backbone that production companies, telcos and broadcasters rely on to make immersive live experiences possible for their viewers. With world-class products and expertise, Appear's focus on modularity, efficiency and high quality helps customers stay ahead of competition in a market where expectations and requirements are constantly changing and evolving.

Visit: <https://appear.net>
Contact: info@appear.tv

ABOUT ZIXI

Zixi provides a cloud based and on-premise software Platform enabling the management, orchestration, monitoring, and delivery of broadcast-quality live and live linear video over managed and unmanaged IP networks to broadcasters, enterprises, over-the-top video providers, and mobile service providers around the world. Over 10+ years, the Zixi Enabled Network of partners has grown to over 250 OEM and service providers with whom Zixi serves well over 700 media customers around the world with 20,000+ channels delivered daily.

Contact: sales@zixi.com

END-TO-END PROTECTED CONTRIBUTION LEVERAGING ZIXI

With the industry leading Zixi protocol, the **Software-Defined Video Platform (SDVP)** is the only solution that can provide five and six nines availability utilizing patent pending sequenced hitless and bonded hitless failover over mixed IP networks such as internet, fiber, satellite and cellular.

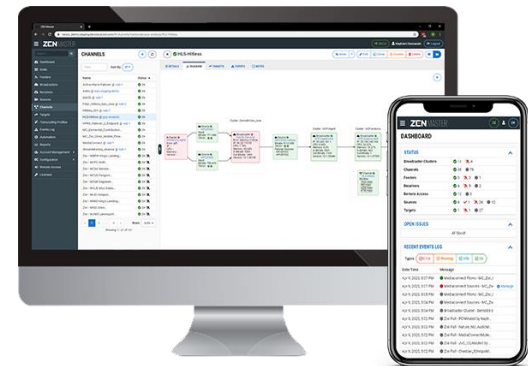
The **Zixi protocol** is a resilient congestion and network-aware protocol that adjusts to varying network conditions and employs patented, dynamic Forward Error Correction techniques for error-free video transport over IP with 99.9999+% uptime at minimal latency. With minimum overhead to physical bandwidth, the Zixi protocol removes jitter, recovers and re-orders packets, smooths video delivery enabling the streaming of broadcast-quality video over any distance, while overcoming the varying network conditions of unmanaged networks.

Zixi's **Video Solutions Stack** provides essential software tools and core media processing functions that allow for transcoding, auto-slating and time-shifting over multiple transmission paths and bitrate adaptation to ensure reliability over any IP network and any protocol.

SIMPLE STREAM CONFIGURATION, ORCHESTRATION AND MONITORING AT SCALE WITH ZEN MASTER

To orchestrate, monitor and manage live streams at scale, Appear users can choose to leverage **ZEN Master**, Zixi's cloud-based control plane that allows for the simple configuration, orchestration and monitoring of the devices and appliances that are part of the video transport network.

With ZEN Master, Appear can easily create live streaming workflows and access content anywhere in the world.



Zixi's ZEN Master UI

KEY ZEN MASTER BENEFITS

- **Multi-Cloud Infrastructures** (AWS, GCP, Azure) allow for agile scalability
- **Root Cause Analysis** – Detection and isolation across streams and environments
- **Automation** – Schedule a set of tasks and run them with a single click
- **Enhanced Reporting** – Granular reporting provides key data, including usage reports, status summaries, and up-time and outage reporting
- **Monitor Global System Health** – Confirm QoE and QoS – ZEN Master offers TR101, Content Quality Analytics, Business Impact Analytics, AI Quality Scoring
- **Access to Zixi's Intelligent Data Platform** – Use advanced analytics, AI and ML to digest historical and real-time data and alert on stream health before issues occur