

Pixel Xtream® 3 Multi-format Transcoders for 360 Systems

Unleash the Full Power of 360 Systems HD/SD Broadcast Servers Using Ipera Pixel Xtream 3 Multi-format Transcoders

- Speed Faster than real-time transcoding on almost all formats
- Workflow Works seamlessly with your existing 360 Systems servers
- Quality Automatic visual quality enhancement



Ipera Technology's algorithmic solutions, trademarked Pixel Magic®, are designed to improve video quality and reduce bit-rates wherever video is created, processed, streamed or played back on servers, broadcast equipment, PCs, consumer electronics and mobile devices. Built upon the patented and patent pending Pixel Magic® technology, Ipera also offers a line of Multi-format transcoders called Pixel Xtream®, delivering unparalleled speed and quality to our broadcast customers worldwide.

Highlights

Workflow and Format Support -- Ipera has worked closely with 360 Systems to create a seamless workflow to convert video files between the 360 Systems HD (MAXX 1200, 2400-HD and 2420-HD) and SD (MAXX 500, 1000 & 2400) servers and other broadcast equipment. This enables the current and future 360 Systems customers to create new content for their 360 Systems servers from many formats of post-production, broadcast and streaming video files (Please refer to the format support table for a complete list of Pixel Xtream® 3 compatible formats). Pixel Xtream® also preserves the metadata, including various closed caption information, between formats. Additionally, Pixel Xtream 3 supports unlimited watch folders and XML-based API integration.

Faster Speed – Besides the well validated workflow, the Pixel Xtream® transcoder also has increased transcoding speed and throughput, compared with other leading competitors' products. On a typical i-7 based single CPU server, it can achieve transcoding throughput that is faster than real-time on 1080P MPEG-2 TS/H.264 to MXF/JPEG-2000 conversion -- up to 3 times faster compared with other solutions on the market.

Higher Quality -- Enabled by Pixel Magic®, Pixel Xtream® beats other transcoding products in quality shootout testing. Pixel Xtream® can analyze source video to filter out noises, distortions, and artifacts

Worldwide Sales



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without introducing new distortions. Enhancement algorithms allow transcoding to lower bitrates for all source content while visual quality is enriched with sharper contrast, improved brightness, vibrant color, as well as sharper edges and details. Ipera's highest quality de-interlacer and scaler technology also helps preserve the video quality during conversions. This video enhancement technology is automatically enabled, always on, and requires no operator setup and intervention. It can also be turned off or operated in manual mode if needed.

Lower Bit-rates -- Ipera's bit-rate reduction technology helps reduce the bit-rate on the bit streams, enabling the transcoder to work more efficiently.

Usability -- Pixel Xtream® is very intuitive and user friendly. Many customers find themselves skipping the User Guide to start clicking away and quickly becoming expert users. Pixel Xtream® can take input from a local or remote server to produce and send output directly to the 360 Systems servers. The content captured using 360 Systems servers can also be converted by Pixel Xtream® to other formats for other uses. The patented **side-by-side preview** feature allows the user to instantly know what the results are before they start the transcoding process. Pixel Xtream® also supports sub-profiles that allow users to create more than one format of outputs in one job. The setup files included with the software will get users started on their mission-critical jobs within minutes.



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Ipera Pixel Xtream® 3.0



360 Systems Maxx -2420 HD

Benchmark Data

Format Support

Use Cases	Target Format	Source Format	
		50 Mbps DVCPRO50 / AVI	12 Mbps 1080i HD MPEG-2TS
Mobile	3GPP H.264 320 x 240 128 kbps	17.7 X	10.8 X
	iPhone 640 x 480 700 kbps	12.1 X	7.5 X
Web	Flash 9 480p 2 Mbps	7.5 X	6.5 X
	MP4 H.264 640 x 480 700 kbps	12.1 X	7.5 X
	WMV VC-1 480p 1.5 Mbps	2.6 X	3.2 X
Broadcast IPTV	MPEG-2TS H.264 480p 800 kbps	10.2 X	7.0 X

ı	Broadcast	MPEG-TS / H.264 1920 x 1080p	1.6 X	2.0 X
		5 Mbps		
	HD	MXF (OP-1a) / J2K 1920 x 1080i 80 Mbps	1.0 X	1.1 X

Performance data based on a system with single i7-2700K 3.5GHz CPU and 8GB

RAM. Performance can be further improved on Xeon-based servers.

System Requirements

Windows XP/Vista/7/8, Windows Server 2003/2008

CPU: Dual Core, 1.6 GHz minimum (Quad Core, > 2 GHz recommended)

RAM: 1 GB minimum (> 2 GB recommended)

Microsoft DirectX 9.0c (or later)

Video Codecs

- MPEG-1, MPEG-2, MPEG-4
- H.263, H.264, Flash
- AVC Intra, PitchBlue, PathFire
- Windows Media 7, 8, 9, 10, VC-1
- DivX, XviD
- DV, DV25, DV50, DV100, DVCPro, DVCPro50, DVCProHD
- JPEG 2000, D10/IMX, XDCam EX
- DNxHD
- RAW/RGB, YUV
- HDV2
- Apple ProRes
- V210
- MPEG-2 Long GOP

Other

■ Closed Caption support for JPEG2000/MXF, MPEG-4, MPEG-2 and H.264.

Media Containers

- 3GPP, 3GP, 3G2
- MPG, M2V, MP4, M4V, FLV, F4V
- MPEG Transport Stream
- MPEG Program Stream
- WMV, AVI, ASF, MOV
- MXF, MKV, VOB

Audio Codecs

- AAC, AAC+, AMR
- MP3, MPEG Layers 1/2
- Windows Media
- PCM, WAV
- AC3 Pass-through

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 $^{^{}st}$ Some formats are only supported on input. Contact us for the latest format support list.