PIXFIX™ LIVE - EL Series





With 1 or 2 Channel SDI or up-to 4 Channel IP inputs, this entry level enterprise class ENCODER/TRANSCODER hardware empowers broadcast, education and surveillance segments to deliver multi-screen solutions. With on the fly bit rate using PIXABI™ AND stream maximization techniques using PIXMAX™, the EL Series delivers best bang for your buck making it an ideal product for your entry level enterprise needs.

Applications

PIXFIX™ LIVE-EL Series delivers encode/transcode performance with **PIXFLEX™** its state of the art software driven media processing engine for entry level enterprise needs – that includes Single or two channel broadcasters who want multi-screen streaming capabilities and to those market segments who want non-stop IP Video delivery capabilities.

Broadcasters

For single channel and two channel SDI input or up-to 4 Channel IP input broadcasters, the PIXFIX™ LIVE-EL Series delivers the most optimal solution for delivering IP Video for multi-screens. Capable of delivering enterprise class features for low channel count customers in both pre-processing and post processing features – the product packs in with lot of punch.

Education

For non-stop enterprise class Encoding/Transcoding needs for both Live and On demand/On premise needs, PIXFIX™ LIVE-EL Series with either PIXFIX™ STREAM or SYNERGY™ CLOUD solutions can deliver the best of the breed video delivery for multiple screen.

Surveillance

In a multi camera environment for monitoring purposes with the PIXFIX™ LIVE EL-Series ability to take in RTSP inputs, is an ideal solution for large volume monitoring and archiving.

Features and Benefits

- Encoding and Transcoding through state of the art PIXFLEX™ engine.
- Highly configurable, through software based media processing and acceleration mechanics using RAFT™, SAND™ and HELM™ video algorithms.
- Flexible input interfaces across SDI, IP and multiple other types of interfaces.



PIXFIX™ LIVE EL1720

PRODUCT AT A GLANCE

Entry level enterprise Encoders and Transcoders for Live video delivery for Multi format multiscreen applications for low channel count broadcasting needs.

MODEL

 EL1720 is capable of delivering Multi bitrate, Multi format outputs integrates4 IP inputs or 2 SDI/HDMI input gives you non-stop industry grade performance.

- Output Multi bit rate management through PIXABIT™ offering granular multibit rate outputs.
- Backup video storage and IP redundancy available through PIXSAFETY™.
- Multi Codec / Multi format available for any type of IP Video stream delivery.
- Enterprise class 1RU or 2RU, rack mountable

General specifications for EL1720

INPUT INTERFACES

 Composite, Component, HDMI with Embedded Audio, S-Video, DVI, ASI, SD/HD-SDI with embedded raw or compressed (Dolby™) audio, Multiple Gigabit IP interface

INPUT STREAM

- TS/ UDP (Unicast and multicast SPTS and MPTS)
- TS/RTP (Unicast and multicast SPTS and MPTS)
- TS/HTTP-SPTS and MPTS
- o RTMP, RTSP, HLS, TCP
- H.264 elementary-Annex B MPEG2 PS. MPEG TS,MKV
- o MOV, MP4, MXF, Apple Prores, FLV

INPUT VIDEO CODECS

- MPEG2-ML/HL 4:2:2,
- o MPEG4 SP/ASP,
- H264 BP/MP/HP 4:2:2 10Bit,
- AVC Intra, Apple prores,
- o HEVC, VC1
- Fixed and variable frame rate
- Standard and non-standard resolution
- o 1080p@60 up to 25Mbps for live delivery
- Error resilience and concealment for erroneous input

INPUT AUDIO CODECS

- AC3, Dolby[™]-E, DTS express[™]
- AAC-MPEG2,
- o MPEG4 (LC, HEAAC, HEAACv2),
- o MPEG4 ALS,
- o WAV.
- Up to 8 channels 24 bit audio,
- Up to 96KHz sampling frequency

STREAMING SERVER PROTOCOL (OPTIONAL)

- o HLS
- o HDS



OUTPUT INTERFACES

 SD/HD-SDI, Multiple Gigabit IP interface with redundancy, ASI, Composite

OUTPUT STREAM

- TS/UDP/RTP Unicast & Multicast, SPTS TS/RTP Unicast & Multicast, SPTS TS/HTTP-SPTS
- o RTMP uplink to popular CDNs
- o TCP/IP
- MPEG2, H.264 elementary Annex B TS, MPEG-PS, MP4, MOV, FLV, MKV

OUTPUT VIDEO CODECS

o H.264 BP/MP/HP 4:2:2 10 Bit

OUTPUT AUDIO CODECS

- o MPEG 1 Layer2/3
- AC3 (pass through), EAC3 (pass through), Dolby™-E (pass through), DTSTM (pass through)
- o AAC-MPEG2
- AAC-MPEG4 (LC, HEAAC, HEAACv2) MPEG4 ALS, WAV, LPCM
- o Up to 8 channel, 24 bit audio
- o Up to 96 KHz sampling frequency
- Loudness Control
- Multi-channel audio coding in single channel

PRE-PROCESSING, ENCODING & MISC FEATURES

- Standard and non-standard resolution
- Hue, Contrast, brightness, saturation and gamma correction
- Dynamic profile management through PIXMAX™
- On the fly transcode through PIXIT™
- Encode, Transcode acceleration through RAFT™, HELM™, SAND™ algorithms
- De interlacing through BOB, Motion adaptive, IVTC modes
- o Perceptual quality based video scaler
- Multiple alpha blended logo overlay

- Smooth Streaming
- o DASH
- o RTMP
- o RTSP
- HTTP Fragments Push to edge server
- o HTTP origin configuration for caching

PLATFORM SPECIFICATIONS: EL1720

- o 4 X SD/HD SDI Input or 4 X IP Input
- o 2 X Gigabit Ethernet output
- o 1RU form factor
 - o 1.7" X 17.2" X 19.85"
 - o 43mm X 437mm X 509mm
- o 400W SMPS
- o 110-240V input
- o 500GB storage
- Optional
 - o Hot-swappable Power Supply
 - o Hot-Swappable HDD with Raid
 - Up to 6TB available
 - High availability through PIXSAFETY™
- Rack mountable

- Static/scrolling text overlay
- o Clock/Running time overlay
- Cropping/Letter boxing
- o Look ahead based encoding
- Low latency encoding
- Deblocking filter
- o CBR, VBR and constrained VB streams
- Scene characteristics based encoding
- Configurable display aspect ratio and preserving DAR during scaling
- Thumbnail generation
- o CEA 608/708 pass through
- o Lip Sync correction
- o Delayed output for render/playback synchronization
- Host of appliance control, monitoring and HW diagnostic features

