

DigiLinX[™] Application Note

FAQ on Compression (MotionXT)

What is the primary benefit of compression?

The primary benefit of stream compression is to reduce the network infrastructure requirements in large systems. If the system is running on a single switch there is really no reason to choose compressed streams. However on large networks with shared links, the compressed streams allow a system to be built with 1Gbit/sec uplinks instead of 10Gbit/sec uplinks.

Do all products support compression?

No, All ViewLinX support compressed streams, but only Commercial MediaLinX A/V are able to encode a compressed stream.

Do I need special hardware for compression?

No, the Commercial MediaLinX A/V and any ViewLinX with the latest firmware contain everything need to support compression.

What compression format are you using?

Our compression solution is based on MJPEG (Motion-JPEG) but adds additional algorithms to ensure the best quality video reproduction within the bit rate constraint.

What happens to the signal?

MJPEG technology compress each frame using JPEG additionally for formats over 480p we use a frame rate of 25 fps in the UK and 30 fps in the US.

Other than a slight loss in quality what other differences can I expect?

Because the image must be compressed the latency is 110ms, but the synchronizations remains under 1 ms.

What do I need to do to enable compression?

In Dealer Setup, go to a MediaLinX A/V (only supported on the MLAV9300-CS) and on the Source Tab check the Compress Video box. This will enable the Bit Rate dropdown box. Select the desired bit rate.



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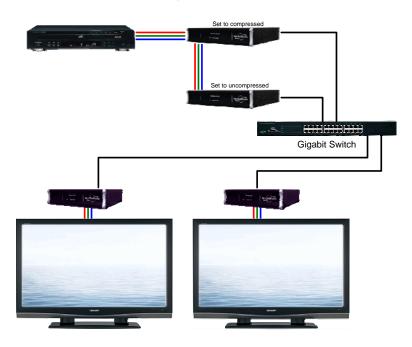
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What bit rate should I choose?

The desired bit rate will vary between projects. The lower the bit rate the less bandwidth used, but it also lowers the quality of the video. You will need to experiment to find the right balance. For HD video content we do not recommend anything lower than 60Mb/sec streams. For SD streams you can try lower bitrates depending on the size of your displays and source quality.

Can I do compressed and uncompressed simultaneously?

Not from a single MediaLinX A/V. The easiest way to achieve this is to chain two MediaLinX to a single source using the pass-through connectors and set one to compressed and one to uncompressed. The source will be available in a compressed and uncompressed format and the system will see each as a separate source.



Any ViewLinX can select the compressed or uncompressed stream

Can I watch compressed video on or from a PC?

No, while the video is compressed using Motion Jpeg other algorithms are used to improve the video quality while maintaining compressed speeds. At some point in the future streaming to or from a PC may be possible, but currently this is not supported.