Subject: Re: 16 bit greyscale / grayscale videos
Posted by DavidPS on Wed, 20 Jan 2010 15:43:19 GMT
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On Jan 20, 2:48 pm, 2...@onetel.com wrote:
> I'd like to generate 16-bit greyscale videos to retain the full
> sensor
> fidelity and be able to replay them on the standard (free) video
> players. Is this possible in IDL 6.0?
>
> I'm thinking with medical and infra red imaging, high quality imaging
> sensors, and processing power 16-bit greyscal video should be doable
> now without too much difficulty. Does anyone have any suggestions
> about how to go about generating and displaying 16-bit video.
>
> many thanks,
> Neil

Hi Neil,

I haven't done much videos with IDL, I'd never been very happy with the results. What I've used is FFMpeg, first I save the frames on jpeg (or other format you like) and then make a video with ffmpeg in your favourite format. Ffmpeg is opensource and offer a big list of formats (http://en.wikipedia.org/wiki/FFmpeg).

In linux what I do with image-0000.jpg to image-nnnn.jpg is:
ffmpeg -r 20 -b 15M -i image-%04d.jpg film.mp4

Cheers,

David

Subject: Re: 16 bit greyscale / grayscale videos
Posted by mankoff on Wed, 20 Jan 2010 16:34:42 GMT
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On Jan 20, 7:43 am, DavidPS <dps.he...@gmail.com> wrote:
> On Jan 20, 2:48 pm, 2...@onetel.com wrote:
>
>> I'd like to generate 16-bit greyscale videos to retain the full
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>> fidelity and be able to replay them on the standard (free) video
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>> many thanks,
>> Neil
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> Hi Neil,
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> the results. What I've used is FFMpeg, first I save the frames on
> jpeg (or other format you like) and then make a video with ffmpeg in
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> In linux what I do with image-0000.jpg to image-nnnn.jpg is:
> ffmpeg -r 20 -b 15M -i image-%04d.jpg film.mp4
>
> Cheers,
>
> David

I don't think JPEG will hold 16 bit color. PNG will, and then use some
3rd party software to animate the sequence of PNGs.

Subject: Re: 16 bit greyscale / grayscale videos
Posted by 2d on Thu, 21 Jan 2010 08:25:52 GMT
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Yes, PNG and TIFF both support 16-bit greyscale storage. However, as i
understand with TIFF you can create a single file containing multiple
images, which is more convenient, for passing to animation software,
whilst PNG only stores one image per file, so that less convenient. Is
there any way to store multiple PNG images in a single PNG file?

Question then remains is what animation software and movie media will
retain the 16-bit greyscale fidelity? Most of these do RGB of 8 bit
for each colour, so that wont retain the full 16-bit greyscale
fidelity.

Thank you, Neil

Subject: Re: 16 bit greyscale / grayscale videos
Posted by DavidPS on Fri, 22 Jan 2010 11:44:40 GMT
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On Jan 21, 8:25 am, 2...@onetel.com wrote:
> Yes, PNG and TIFF both support 16-bit greyscale storage. However, as i
> understand with TIFF you can create a single file containing multiple
> images, which is more convenient, for passing to animation software,
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> Question then remains is what animation software and movie media will
> retain the 16-bit greyscale fidelity? Most of these do RGB of 8 bit
> for each colour, so that wont retain the full 16-bit greyscale
> fidelity.
>
> Thank you, Neil

I looked around and found that ffmpeg retain 16-bit greyscale
fidelity, this date from 2006
http://lists.mplayerhq.hu/pipermail/ffmpeg-devel/2006-Octobe r/017237.html
Cheers,

David

Subject: Re: 16 bit greyscale / grayscale videos
Posted by MC on Tue, 02 Feb 2010 10:00:03 GMT
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On Jan 21, 9:25 pm, 2...@onetel.com wrote:
> Yes, PNG and TIFF both support 16-bit greyscale storage. However, as i
> understand with TIFF you can create a single file containing multiple
> images, which is more convenient, for passing to animation software,
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> Question then remains is what animation software and movie media will
> retain the 16-bit greyscale fidelity? Most of these do RGB of 8 bit
> for each colour, so that wont retain the full 16-bit greyscale
> fidelity.
>

Not only that, it is unlikely that one can tell the difference between
16bit and 8bit greyscale visually -even if Mach banding effects are
present...

Cheers
