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
- >> sensor
- >> fidelity and be able to replay them on the standard (free) video
- >> players. Is this possible in IDL 6.0?

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- >> I'm thinking with medical and infra red imaging, high quality imaging
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>> 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.

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 View Forum Message <> Reply to Message

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

> David

Subject: Re: 16 bit greyscale / grayscale videos Posted by DavidPS on Fri, 22 Jan 2010 11:44:40 GMT View Forum Message <> Reply to Message 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,
- > 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

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 View Forum Message <> Reply to Message

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,
- > 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.

>

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