

## Re: LED lights for filmmaking

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**From:** Adam Aglionby ([nws\\_at\\_capersville.co.uk](mailto:nws_at_capersville.co.uk))

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Trimmed crosspost abit because server will think its spam...

Hi from sci.engr.lighting

"Daniel Kelly (AKA Jack)" <d.kellyNOSPAM@NOSPAM.ucl.ac.uk> wrote in message news:cl5mu4\$g2e\$1@uns-a.ucl.ac.uk...

> *Hello,*

>

> *I recently saw an advert for some LED lights for filmmaking. They looked*

> *perfect – very efficient, flicker-free, dimable from 0–100% etc. The*

> *problem is that they're extortionately priced. So now I want to make my*

own

> *LED lights for use on film...*

Efficient, er, um, see those MR16s your using at the moment, theyre probably abit more efficient..

>

> *Has anyone tried this? What should I be careful of? Can I vary the*

colour

> *temperature of the lights by pushing more or less current through the*

LEDs?

Not really, whites because theri blue with a phosphor go a bit of angry blue when you overdrive them though....

> *Even better – does anyone know of any LED lights suitable for film that I*

> *could buy off the shelf here in the UK?*

Sure I saw Kino Flo with some prototype Luxeon LED film lights a while back, but then they make fluro compact film lights which fro general light are probably still a better bet.

> *Here's my dream LED light:*

>

> *– dimmable from 0–100% with no change in colour temp (ultimately I'd like*  
to

> *build in a remote control so I can change dim the light whilst I'm looking*

> *through the viewfinder on my camera)*

sci.electronics.basics: Re: LED lights for filmmaking

That's kind of doable, but current white LEDs are basic phosphor wise, with a high colour temperature and not great Colour Rendering Index.

RGB colour mixing does not give a good white, some units have started using RGB and Amber to warm it up a bit.

> – *cheap!*

cheap or bright?  
cannae have both

> – *highly efficient*

If you don't need a lot of light, say an LED macro ring it is efficient for the purpose, as replacement Redhead, not yet.

> – *stable and predictable colour temperature (it would be very cool if I could change the colour temp with a switch... my research into LEDs so far has hinted at the possibility of changing the colour temperature by increased in the current).*

Going cooler CT wise in white,  
but cooking LED in practice,  
lowering efficiency, LEDs hit sweet spot at exceedingly low currents  
Negative temp co-efficient means output goes down as heat goes up  
Lowering lumen maintenance, cooked phosphors and LED dice put out less light as they age, hard life will age them faster

> *Please do let me know your thoughts – any leads you can give me will be very well received*

<http://www.ledmuseum.org/>

<http://members.misty.com/don/>

HTH  
Adam

> *Thanks,*  
> *Jack*  
>  
>  
>