

## IBC 2015

# HIGH DYNAMIC RANGE

End-2-End Live HDR  
Acquisition

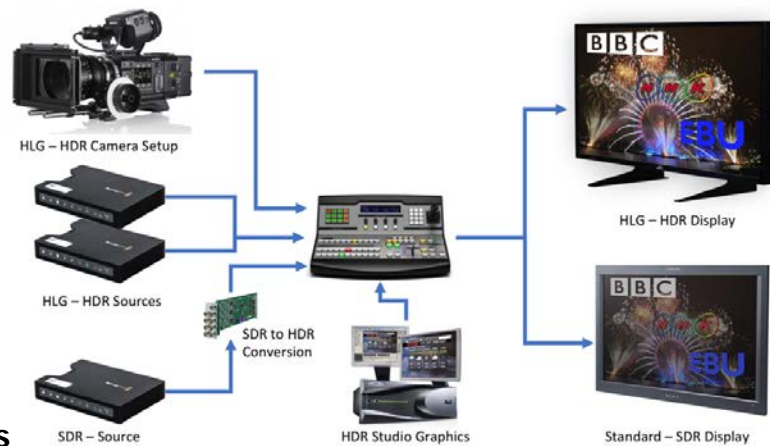
Post-production  
Distribution

### Overview

Since the beginning, discussions about UHD TV have included the mantra “not just more pixels but better pixels”. High Dynamic Range (HDR) gives a major boost to any resolution image but it also brings many questions about how HDR will work with current broadcast and production infrastructure and how can standard and high dynamic range images be used together!

The Broadcast Technology Futures group is investigating this topic, especially the requirement for HDR to be compatible with current infrastructure and Standard Dynamic Range (SDR) displays without the need for metadata. The Hybrid Log Gamma Law (HLG) HDR system jointly developed by the BBC and NHK is one such system.

This simple demonstration uses two cameras loaded with the HLG curve, fed to a standard vision mixer and combined together with converted SDR source material and HDR graphics. The mixer output is fed directly to a 2 000cd/m<sup>2</sup> display and a conventional (SDR) display.



### Key messages

- HDR offers a major perceived quality boost that is independent of resolution
- SDR compatibility is vital for a smooth transition to HDR services
- Live production without the need for metadata in production or distribution

### Related information

- BBC White Paper  
<http://www.bbc.co.uk/rd/publications/whitepaper309>
- ARIB HDR Standard  
[http://www.arib.or.jp/english/html/overview/doc/2-STD-B67v1\\_0.pdf](http://www.arib.or.jp/english/html/overview/doc/2-STD-B67v1_0.pdf)



Scan for more HDR detail

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