

BluFocus presents:  
3D-FOCUS: Part I - Blu-ray  
An Introduction to 3D  
by Industry Experts

# *FOCUS*

An ONLINE WEBINAR  
March 4th, 2010  
11:00am PST  
[www.blufocus.com](http://www.blufocus.com)



# Welcome



- Introduction of **3D-Focus Webinar: Part 1 – Blu-ray**
- Submit questions via chat or email [3D-FocusWebinar@blufocus.com](mailto:3D-FocusWebinar@blufocus.com)  
They will be collected for the Q&A section at the end of all presentations.
- Please note that not all questions might be asked depending on number received.

## **ENJOY!! Let's begin!**

Start time: 11:00 pst



A  
G  
E  
N  
D  
A

### 3D Overview

- THX – Rick Dean



### Video Encoding

- Sensio – Etienne Fortin
- TDVision - Manuel R. Gutierrez Novelo



### 3D Authoring

- Sonic – Chris Neely
- Netblender – Denny Breitenfeld
- Sony – John Ying & Rob Aubey



### Content Creation

- Trailer Park – Curt Doty



### Software/Hardware

- NVIDIA – Alex Soohoo



### Accessories

- RealD – Matt Cowan
- XpanD – Ami Dror



### 3D Testing

- BluFocus/3D-Focus – Juan Reyes



# Accessories



**Matt Cowan**

Chief Scientific Officer, RealD



Mr. Cowan is respected in the post-production community for his knowledge and application of human perception to 3D systems, color, and transfer functions in digital cinema. Currently he holds the position of Chief Scientific Officer at RealD, where he developed RealD's very successful 3D cinema system. He has been instrumental in ongoing developments in 3D delivery to the home.

His work focuses on developing digital technology to a level where it provides images that set the standard for image quality in 3D. He has worked with some of the best cinematographers in the business, determining the best ways to make digital images preserve the artistic intentions.

# 3D And the Living Room

March 5, 2010

Matt Cowan, CSO, RealD

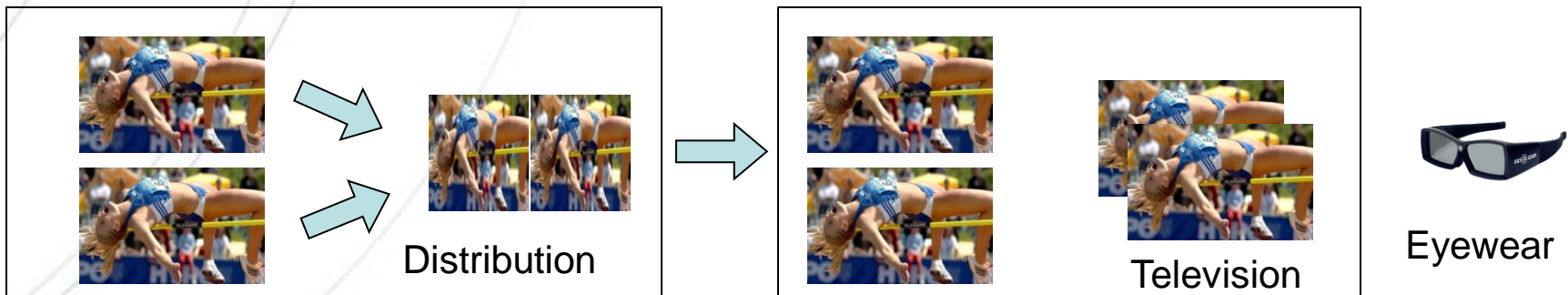
# 3 Most Asked Questions

- Are the Format and the Glasses related?
  - Does the RealD Format require the use of RealD eyewear
- What is the difference between active and passive glasses?
- What are the important performance criteria for eyewear?

# Distribution Format and Glasses



- Distribution Format is an independent point of interchange at the TV (or STB) input
  - Format is the means for multiplexing left and right eye information
  - Managed at the front end of the TV – TV converts format into its internal display requirements
  - E.g., RealD's frame packed SBS format licensed by CE manufacturers (Sony, Panasonic, Samsung, JVC, Toshiba)
- Glasses type driven by how the TV displays 3D.



# Active and Passive Glasses

- Active glasses switch left and right views at the eye.
  - Responds to alternating L-R views from the TV
  - Cost for electronics, batteries, lenses
- Passive glasses respond to opposite polarization from TV
  - May be switched at the TV or alternate line polarization (e.g., Micropol)
  - Relatively inexpensive
- Passive glasses solutions will gain in popularity due to simplicity and lower cost.



# Performance Criteria for Active Eyewear

- Extinction
  - How much leakage is there from left eye image into right eye (and vice versa) (aka “ghosting”)
- Field of View
  - How good is performance with off axis viewing?
- Transmission
  - How bright is the image at the eye?
- Switching time
  - How long does it take to fully switch between eyes?
- Color neutrality
  - How much color shift is induced by the lenses?
- RealD has licensed its active glasses technology to major CE manufacturers (Sony, Samsung, Toshiba, Panasonic, JVC) due to advantages in above categories.



Matt Cowan

REAL D

100 North Crescent Drive, Suite 120  
Beverly Hills, CA 90210, U.S.A.

REALD.COM

