Why?

Content  Display  Glasses
Why?
3D Industry Growth

- Projected growth for 3D TV Units
  - 10 million units in 2011 to a projected 75 million units in 2015*

*Strategy Analytics, Global 3D Enabled Device Sales Forecast, February 2011
3D Industry Growth

3D in the Classroom

3D at Work

3D Cinema & Entertainment
3D Without Eyewear?

• Autostereoscopy (3D without eyewear)
  – Acceptable for handheld displays when viewing angle and distance is fixed.
  – Technology is very expensive, requires further development

• Systems incorporating 3D Eyewear are the best current solution
Potential Market Increase in Personal 3D Eyewear

• 3D TV users

• 3D Cinema: BYO 3D Eyewear?
  – Content providers (i.e. Sony, 20th Century Fox) intend to stop subsidizing 3D eyewear
  – Huge market increase in personal 3D eyewear
  – Ultimately the best direction for 3D Cinema Industry?
Disposable 3D Eyewear

Photo from http://www.yankodesign.com

Personal 3D Eyewear
Vision Performance Institute (VPI) 3D Eyewear Certification

• Define a standard for 3D eyewear
• Identify 3D eyewear that demonstrates:
  – Effective 3D Viewing Performance
  – Durability
  – Comfort
  – Validated Claims
VPI 3D Eyewear Certification

– Physical Property Testing
  • Optical Properties
  • Prescription Quality
  • Coating Quality
  • Durability (Simulated Exposure)

Eraser Abrasion Test

Environmental Durability (QUV)
VPI 3D Eyewear Certification

• Safety Testing and Validation of Claims:
  – Impact Resistance
  – Light Transmission Levels
VPI 3D Eyewear Certification

• 3D Performance
  – Crosstalk Testing

Filtered Light Source—Known Luminance Output for Right & Left-Handed Polarized light

% Transmission

Left Lens

% Transmission

Right Lens
VPI 3D Eyewear Certification

- Pacific University
  3D Wearer Trials
VPI 3D Eyewear Certification

The VPI 3D Eyewear certification program exists to maintain a standard in 3D vision-related eyewear, and to protect consumers from ineffective, potentially harmful products.