

# Successfully Producing DVD Projects

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**Time/Date: Wednesday (July 20, 2005) 9:00am — 12:00pm**

## **Presentation Abstract**

Creating a great DVD takes more than button pushing and using templates - it takes a creative plan. This informative session will give you a firm grasp on the technology side of DVD's capabilities and all stages of DVD production including planning, design concepts, media encoding, and production.

## **Specifications**

### **How much do DVDs hold?**

- Common Formats – What they really hold
  - DVD-/+R or DVD-/+RW
    - (Single Sided/Single Layer) -4.37 gig
  - DVD-/+R or DVD-/+RW
    - (Dual Sided/Single Layer)-8.75 gig
  - DVD-/+R or DVD-/+RW
    - (Single Sided/Dual Layer)-8.75 gig

### **Disc is designed to playback video, audio, and stills**

- All images are in a high-quality (but compressed) format
- Audio can be uncompressed or compressed to save space
- Both video and audio can support multiple streams of content

### **Plan**

- Determine if DVD is the right format
  - Audience Analysis
  - Cost Analysis
  - Purpose
- Create a graphical outline of the project
  - Organizational Chart Maker in Power Point
  - Omni Graffle
- Gather any design/reference materials
- Meet with production group to discuss timeline and goals

## Acquire

- Acquire the Needed Assets
  - Video Tape
    - AD Converter Options
    - Connection Types
    - Hard Drive Considerations
  - Self-Contained QuickTime Movies at Sequence Compression Settings
    - Benefits for Archival
    - Dealing with different Codecs
  - Audio on CD
    - Extracting and Converting
    - Using iTunes to manage
  - Audio on Tape
    - AD Converter Options
  - Still Images
    - Acquisition Considerations
    - Processing in Photoshop
    - Sizing for Output
  - PowerPoint and Flash can be converted
    - Export Menu Considerations
    - Use of After Effects

## Encode

- Process of converting the larger video file to an optimized version that is compatible.
- MPEG-2 is the standard format
- HD Formats arriving, but not standardized
- “Start High... Finish Low”
- A DVD can hold between 1.5 and 3.5 hours per disc depending upon compression and disc format
- Audio can eat up a lot of space... be sure to consider Dolby Digital AC3

- Encoding Tools
  - QuickTime Pro with MPEG2 Add-on ([www.quicktime.com](http://www.quicktime.com))
  - iDVD ([www.apple.com](http://www.apple.com))
  - Apple Compressor ([www.apple.com](http://www.apple.com))
  - Sorenson Squeeze ([www.sorenson.com](http://www.sorenson.com))
  - discreet Cleaner ([www.discreet.com](http://www.discreet.com))
  - ProCoder ([www.canopus.com](http://www.canopus.com))
- Audio
  - 48 kHz Audio Files - Slightly higher quality than a CD
  - Can be uncompressed PCM/AIFF but this eats up about 650 MB per hour
  - Dolby Digital AC3 is a good compromise
  - Determine need for multiple languages, surround sound, or audio tracks

## Menus

- Square vs. Non-Square pixels
  - Pixel Aspect Ratio
  - Final file ends up 720 X 480 NS Pixels
- Highlights use grid slices
- PSD layers OR motion menu, NOT both
- Design Edge to Edge, but TV has a bleed area like print
  - Safe Title Area
    - Same as “Bleed” in Print
    - Action Safe - 90% of image
    - Title Safe - 80% of image
    - Critical safety margin
    - All Video Apps have this including Photoshop CS
- Limited to 99 tracks on a disc
- The Specifications - When designing for NTSC Video
  - Final image should be 720 X 480 non-square pixels
  - Render movie at 29.97 fps or 24 fps
  - Render lower field first for smoother motion on TV
  - Stick with progressive if the computer is your primary output
  - Create Loop in Edit Program and continue audio bed
- Working with Type
  - Use a larger point size
  - Check from 20 feet away
  - White is 235, Black is 16
  - Use anti-aliased type
  - Add a contrasting edge
  - Sans serif fonts easier to read

## Slideshows

- Power Crop
  - Enter target size in Square Pixel values
  - Be sure to specify px for pixels
  - Do not worry about resolution
  - Use Tool Presets
  - Resize to 720X480
  - Download De-Flickerator from <http://www.adobeevangelists.com>
- Video Actions
  - New to Photoshop CS2
  - Create video slideshows
  - Make Broadcast Safe
  - Reduce Interlace Flicker
  - Create droplets to speed up workflow

## Authoring

- Several tools available
  - Vary in features from Consumer to Professional
  - Priced from Free to \$30,000
- Meticulous process
  - Similar to webpage or multimedia authoring
- Insist on a test disc and test it!
- Tools to Try
  - Adobe Encore DVD ([www.adobe.com](http://www.adobe.com))
  - Apple DVD Studio Pro ([www.apple.com](http://www.apple.com))
  - Apple iDVD ([www.apple.com](http://www.apple.com))
  - Ulead DVD Workshop ([www.ulead.com](http://www.ulead.com))
  - Sonic – several options ([www.sonic.com](http://www.sonic.com))
- Try to avoid creating menus inside DVD authoring environment, harness more powerful graphic tools.
- Static Menus are an easier place to start.
- Create a Highlight Layer in Photoshop
  - See separate handout
  - Works in conjunction with motion menu

## Distribution

- Need to determine quantity and audience
- Need to allow time for discs to be manufactured
- Two primary (and distinct) paths Duplication vs. Replication
- Duplication
  - Good for small quantities (even one-offs)
  - Higher compatibility with computers
  - Burners up to 16X speed, but 4X most common
  - Allows for flexibility
  - Avoid stickers on labels
  - Choice for less than 500 discs
  - Epson offers on-disc printing at low costs
- Replication
  - Higher compatibility for all devices
  - Takes at least two weeks to avoid rush charges
  - Need to schedule jobs in advance (like a print run)
  - Create a 'glass master'
  - In sufficient quantities, cost \$2-4 per disc
  - Look for broker, avoid high mark-up

## Show & Tell

- Photoshop
- After Effects
- Backgrounds from Stills
- Backgrounds from Footage
- Creating the Highlight Layer

## Resources

- [www.creativecow.net](http://www.creativecow.net)
- [www.layersmagazine.com](http://www.layersmagazine.com)
- [www.cmpbooks.com](http://www.cmpbooks.com)
- [www.dv.com](http://www.dv.com)
- [www.fmctraining.com](http://www.fmctraining.com)
- [www.rhedpixel.com](http://www.rhedpixel.com)